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## MILITARY ESSAY.

(Honourably Mentioned.)

*Subject :*

“THE RELATIVE ADVANTAGES AND DISADVANTAGES OF VOLUNTARY AND COMPULSORY SERVICE BOTH FROM A MILITARY AND A NATIONAL POINT OF VIEW.”

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“Wisdom is justified of her children.”

### INTRODUCTION.

SPEAKING generally, there is but one form of voluntary service, while there are many forms of compulsion. A comparison between the two systems may be made in one of two different ways. We may either compare the voluntary system with each possible form of the compulsory, and then proceed to ascertain whether that system which appears to be theoretically best is practically applicable to our needs; or we may attempt to first determine which of the various forms of compulsion would suit us best, and then weigh that form against the voluntary system.

Of these two methods, the latter appears likely to lead us more directly to a definite conclusion; but, whichever method we employ, it is necessary that, if possible, we should commence the comparison with some clear conception of our military needs. Moreover, it is necessary that we should have practically a unanimous agreement with that conception, otherwise our arguments will not be generally convincing, and no definite result will be attained.

The military question is made up of three great problems, viz. :—

1. Do we require an Army at all?
2. What is the size and the nature of the force that we require?
3. What is the best method of obtaining and maintaining that force?

These problems are placed above in their logical order. Until we are agreed as to what is the correct solution of the first two, it is well-nigh hopeless to attempt to agree on any solution of the third.

As regards the answer to the first, we may take it that, at any rate in the opinion of an overwhelming majority, we do require an Army. On the second point, we do not stand on such firm ground. We have an Army of a certain size and nature; whatever party may be in power, we find that no appreciable alteration in it is made; it would, therefore, appear that in the opinion of a constant majority our existing force is in accordance with our requirements. Beyond a doubt, however, a very considerable number of our fellow-countrymen differ more or less widely from this view. They not only differ from it, but they believe that the opinion of the majority is not the result of careful consideration, but that it is the outcome of apathy and a failure to realise individual responsibility.

The result of this state of things is more or less evident in every past discussion on the comparative merits of the two great systems of enlistment. It is made evident by an invariable tendency to drift back from the point at issue into the rocks which surround the second problem. This is natural. We must be agreed on this second problem before we can agree on the third; our minds recognise this, and, feeling that we are not so agreed, they instinctively cast back.

For other Powers it is a comparatively simple matter to decide on the military force which is necessary to guarantee national security. Germany can say:—"France can, in case of war, place so many men on our frontier in such a time. The objective will be Berlin. We must have at least equal strength to oppose them." Moreover, the more autocratic the form of government is, the fewer are those with whom decision rests. With us our geographical position, sea-power, and the peculiarities of our existing organisation, complicate the question to an enormous extent, and our popular system of government does not favour unanimous agreement on such matters.

This is not the place to attempt a solution of this important and most complicated problem. But it is very necessary to show the relation that exists between the military force which a nation requires, and the system of enlistment which it should adopt; to show that, as regards the point now at issue, we are met at the very outset by an apparently insurmountable difficulty.

Under such circumstances, but one course appears to be open; that is to discuss, as far as possible, such inherent advantages and disadvantages of each system of enlistment as appear to be inseparable from it (and, therefore, more or less independent of the size of the Army which it is proposed to maintain), and to endeavour to ascertain how far our conclusions may be affected by any given variation in military strength; secondly, to discuss the bearing on the question of any peculiarities in our situation, and in our existing organisation; finally, to endeavour to draw some definite conclusions.

With these objects in view, I have divided my essay into three parts as follows:—

- Part I. Inherent advantages and disadvantages of each system, and the influence of numbers on these.
- Part II. The allowance to be made for peculiarities in our existing organisation, and in the geographical distribution of our Empire.
- Part III. Conclusions.

#### WHAT FORM OF COMPULSORY SERVICE IS MOST PRACTICALLY APPLICABLE TO OUR NEEDS?

I will now, for a brief space, turn back to my first proposition. If it be possible to decide beforehand as to which of the various forms of compulsory service would be most applicable to our probable needs, my task will be considerably simplified.

If we require an Army of 4,000,000 men, we can only maintain it by means of a rigorous application of the principle of compulsory, universal, personal liability. If we do not require more than 50,000 men, there need be no question of compulsion. It is only when the size of the Army lies between these extremes that we find ourselves on debatable ground. In our case, one thing at least is certain—our needs lie somewhere between these extremes.

We are fully agreed that we do not require the services of every man available; we are even agreed that the number of exemptions which we could safely allow would be very considerable.

Now, so long as the number of exemptions allowed is small, the most just and profitable method of arranging them is easy to determine. The burden of service is evenly distributed, and no individual is handicapped. But as we increase the number of exemptions, we add enormously to the difficulty of determining in what form each individual should make payment of the duty which he owes to the community.

The fairest course is to so reduce the period of service that every man will be required to render personal service. Considerations of military efficiency, however, limit our powers of applying this principle. In our own case—even taking for our Army the most considerable numbers ever seriously demanded, and accepting the shortest period of service which appears to have ever been suggested as sufficient for efficiency—we should still not require personal service from half, or more than half, of the total number of young men available. Thus, if we called out 100,000 recruits annually, and fixed our term of service at one year with the colours and four with the Reserves, we should have a Regular Army of approximately 500,000 men (speaking in round numbers and omitting casualties). Remembering that this number would be for home defence only—our colonial needs must be separately considered hereafter—it is in excess of anything that has ever been seriously recommended, even if we make a liberal allowance for casualties and inefficient recruits. Yet

we should still have annually available more than 100,000 young men,<sup>1</sup> to whom it would be necessary to grant exemptions. Apparently, then, we could not solve the difficulty in this way, although we might well lessen it.

Other possible solutions are :—

1. Selection by lot.
2. Substitution.
3. Dotation.
4. Exemptions founded on qualifications, inherited or otherwise acquired.

To select by lot is to trust to chance what could surely be more equitably and more profitably decided by intelligence.

"Substitution" and "Dotation" have already been fully tried in France, and to some extent by ourselves, and both systems can be shown to be so objectionable that we can dismiss them at once. The arguments concerning them are too well known to require mention here.

We are thus thrown back on exemptions founded on inherited or acquired qualifications. In making our selection, there is one main principle to be kept in view—the great principle on which all national considerations must rest—viz., the greatest good of the greatest number. Where individual interests clash with national, the former must go to the wall.

This is a theory which commands universal approval, and is most easy of enunciation. But, when we come to apply it to practical affairs, we are apt to become bewildered and lost among a multitude of conflicting considerations.

As regards compulsory service, the first certainty we have to work on is this : that all classes alike, although they may come to approve of the principle, will be desirous of escaping from their share of the burden. From this we may deduce a possible clue to the solution we seek. We are able to find now a considerable number of men who are willing to serve as soldiers. These cannot have any very rooted objection to military service. Why should not our compulsory system be aimed chiefly at them ? On this point the author of the Royal United Service Institution Prize Essay<sup>2</sup> for 1875 speaks as follows ; referring to what he describes as "limited or class conscriptions," he says :—"They were both vicious in theory and tyrannical in practice, being founded upon the monstrous principle that in emergencies some men are bound to serve their country and some are not." Now, where is the essential difference between our present system of service and the "monstrous principle of limited or class conscriptions" ? As we arrange at present, every able-bodied man who has sufficient means to live comfortably, or who, not having such means, is not above begging or going to the workhouse, is exempt from service.

<sup>1</sup> The census commissioners gave 207,943 as the number of young men who attained the age of twenty in 1871. I am unable to give more recent figures.

<sup>2</sup> I have made very free use of this essay in the following pages, more especially of the many very valuable extracts from various works which it contains.



Those who are not included in either of these categories, although, theoretically, they have some option in the matter, are practically forced to serve in the place of those who are.

The man of means has to contribute towards the support of the man who serves. The beggar and the pauper look to the man of means to support them, while they offer nothing in return. There may be some exaggeration in this way of stating the case; but on the whole, it would appear to be at least a close approximation to the facts.

The system of paying another man to endanger his life in one's place, and in defence of one's possessions, appears to be, in truth, a perfectly natural business transaction, which is in no way unjust, however much it may be lacking in nobility.

A "limited or class conscription" would give very much the same results. The comparatively rich man would pay; the comparatively poor man would serve. There would be this distinct advantage, from both the moral and the businesslike points of view, that the pauper and the beggar would no longer escape altogether from the burden of either paying or serving.<sup>1</sup>

One way or the other every man would pay his debt to the community.

The essential difference between the systems is this:—With voluntary service the poor man makes his own bargain with the rich. With compulsory service he would apparently lose this advantage. The system might develop into a species of slavery. In the first place, however, British love of fair play and hatred of oppression might almost of itself be trusted to insure to him a fair recompense. In the second place, many of those liable to service, together with their relatives and friends, would form such a large party, politically speaking, that with our Constitution it would be impossible to oppress them. It would be necessary to obtain their consent to the system before it could be put into effect at all; and they would ever after retain the power of bringing about an alteration of it by legal means.

The third way is one by means of which soldiers have throughout all ages obtained their rights when these were withheld; the way which in civil life is known as a "strike," and in military life as "mutiny."

Protected in such a manner, the soldier should not need to fear either harsh or unjust treatment. He would, in fact, still be in a position to make his own bargain.

The word "mutiny," which I have been obliged to mention, shows, perhaps, where the real evil of this form of compulsion must be sought. Could it be, under any circumstances, advisable to adopt a system which obliges us to contemplate the possibility of a spirit of mutiny arising? Surely such a system would not give us military efficiency, or the security which is our object, while it would set class against class and have an evil effect generally on society?

Undoubtedly it would be a most unwise step to adopt any system which might lead to anything resembling a mutinous spirit in the Army;

<sup>1</sup> The connection between "class" and military efficiency is discussed further on.

but would there be any reasonable probability of such a calamity occurring, taking into account the various considerations I have mentioned? viz., that the soldier would have given his consent to the law under which he was serving; that there would probably be no desire to treat him unfairly; and, even if there were, legal remedies would be open to him. As a nation we never desire to resort to force while legal means to our ends are available.

It would almost seem as if we should be justified in hoping that there would not even be any unwillingness or dissatisfaction amongst the men, and that they would serve the nation, whether in peace or war, quite as cheerfully, loyally, and efficiently as they do now, and always have done, even when they came from the very worst classes and were treated with great harshness in many ways.

The sentiment that every man should serve instead of paying another to take his place is a noble one; but, where a nation does not require personal service from more than half those available, it would seem that we cannot avoid having a system in which some pay instead of serving. In this case there is nothing unreasonable or immoral in arranging that those should serve who are unable or unwilling to contribute so effectively in any other way to the general welfare.

Our history shows that the men we get now possess the necessary qualities for military efficiency. With a compulsory system such as that into which I have just examined, we should get the same class of men as we now have, and have had for many years. We should, therefore, have at least the qualities necessary for efficiency,<sup>1</sup> and that with least loss to our industries and without real hardship or injustice to the individual.

Any other system of exemptions, while it would be equally open to the objection of possible dissatisfaction amongst the men, might entail greater loss to the nation from the industrial point of view. Remembering, however, that we suffer from an "unemployed problem," and that many of those who now enlist through want of work are capable and willing men who do not idle from choice, it is very doubtful whether there is any justification for the conclusion that any loss of national wealth would result, even if it were decided that a proportion of our workers should serve in person.<sup>2</sup>

It may be said that those who inherit wealth cannot be regarded as workers, and should, therefore, not be exempt under a compulsory system. We might reply that these too play their part in the industrial, social, and political life of the nation; but I have a still more effective answer to the suggestion. It is from this class that we obtain our officers; the supply to be obtained from it is greater than the demand. In the scheme which I shall presently propose in solution of the difficulty of garrisoning our possessions abroad, a necessary feature is that our

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<sup>1</sup> This is a disputed point into which I have examined further on.

<sup>2</sup> It must be remembered that the adoption of compulsory service does not necessarily mean any increase in the size of our Army. The fact that the great Continental Powers are compelled to enforce universal liability appears to have caused a widespread misunderstanding on this point.

officers should be volunteers. Compulsion for officers is, in any case, impossible, as we want them to serve for long periods. There is yet another possible method of dealing with this class which I will presently consider.

These various considerations appear to lead to the following conclusions :—

- a. When the relation between the number of young men available for service and the number actually required is such that a very large number must be excused from serving, the difficulty in selecting those to be excused is very great, and is a serious obstacle in the way of a compulsory system.
- b. Any system of exemptions that we may adopt must be mainly founded on qualifications inherited or acquired. All systems are open to the objection that serious dissatisfaction may arise amongst those required to serve, but a popular form of government should afford great protection from this.
- c. If under such circumstances a nation decides on adopting compulsory service, it would be best to adopt that form of it which would bring into the Army the able-bodied men who are otherwise of least use to the community—excluding criminals and men who have been convicted of any disgraceful offence.
- d. There is nothing really immoral or unjust in such a course.

Now, I have pointed out that we can reduce the number of exemptions by shortening the period of service, and I have assumed one year with the colours and four with the Reserve as a minimum. If we could still further reduce these periods we might altogether avoid exemptions, so far as it is advisable to do so. The minimum period of colour service is fixed, for purposes of home defence, by considerations of efficiency. How may we arrive at a minimum for Reserve service?

A Reserve man is at his best when he leaves the colours. After a certain time he begins to deteriorate, especially if he be not called out for periodical training. So far as efficiency is concerned, therefore, there is no minimum period of Reserve service. The great burden of Reserve service lies in the uncertainty which necessarily attaches to it; the longer this uncertainty lasts the greater is the burden.

With an annual quatum of 200,000 men, a colour service of one year and the same period in the Reserve, we should have an Army of 400,000 men. Remembering, however, that we should always be liable to war while our annual quatum was yet untrained, we could only count on always having ready 200,000 Reserve men for first line, with 200,000 recruits to fall back on, without taking into account casualties from sickness, etc.

These figures are only intended to present a hypothetical case, but they serve to show a possible method of escaping from the great exemption difficulty. Such a system as I have outlined would have the effect of distributing equally and reducing to a minimum the burden of service; while it would afford a means of training a vast number of men

to arms, whose services, though costing nothing in peace-time, would probably be willingly given—or might be made available by law—in case of actual invasion.

The gross loss to the nation from the industrial point of view would—in the hypothetical case examined—amount to the labour of 200,000 young men, and this only if we assume that work for every man would always be available. The loss to the individual would be one year out of a lifetime, and even that would not be all loss, since military life is in many ways a good training.

Summing up the foregoing, it appears that we are reduced to a choice between two compulsory systems, viz., exemptions founded on acquired or inherited qualifications; or such a shortening of the period of service as would enable us to avoid all but really advisable exemptions.<sup>1</sup> Of these two systems, the latter seems at once the more equitable and the more profitable.

As, however, it is distinctly open to dispute which of the two the people of Great Britain would be likely to prefer, I will endeavour to take both into account in the following pages.

### PART I.

#### THE INHERENT ADVANTAGES AND DISADVANTAGES OF VOLUNTARY AND COMPULSORY SERVICE,<sup>2</sup> AND THE INFLUENCE OF NUMBERS ON THESE.

As regards the influence of numbers, very many of the advantages and disadvantages usually stated rest altogether on the assumption, already alluded to, that compulsory service necessarily entails a much larger number of men being kept under arms than voluntary service does. It should be needless to point out that this assumption is absolutely wrong. A nation requires a certain force to guarantee its security; its requirements remain unaltered whatever system of enlistment it may adopt. Arguments which depend for their existence altogether on this misunderstanding may be at once set aside.

The following list includes the substance of the different advantages and disadvantages which have been attributed to each system.

1. Considerations depending chiefly on our estimate of the character and feelings of the people:—

- a. Voluntary service is in accordance with our national character and the spirit of our institutions; whereas compulsory service is contrary to public feeling, and, being forced, must be bad.

<sup>1</sup> It must be remembered that there would always be a considerable number of young men whom it would be advisable to exempt, both from motives of justice and profit, *e.g.*, only sons of widows; men below the ordinary standard of physical or mental development. Besides this, our Navy requires the services of a considerable proportion of the nation's manhood.

<sup>2</sup> The advantages and disadvantages hereafter examined have been either taken directly from "Boughey's Military Administration," R.U.S.I. JOURNALS, and the "Syllabus of Staff College Lectures" on administration, or deduced from statements in the above, as well as in the "Army Book for the British Empire."

- b.* With voluntary service the soldier, as a rule, comes from a class of comparatively little value in the social economy of the State, and the burden of his maintenance falls on the entire community.
- c.* It is an advantage to have in the ranks only men who desire to serve.
- d.* With compulsory service we should get a better class.
- 2. Financial considerations :—
  - a.* Compulsory service is more economical than voluntary, at any rate as regards the estimates ; but
  - b.* Is injurious to commerce and industrial life generally.
- 3. Military training and discipline. Under a compulsory system :—
  - a.* Whatever organisation or regulations may be best for the State can be adopted without fear of affecting the supply of recruits.
  - b.* Recruits come in together, which is more convenient as regards their training.
  - c.* Men can be enlisted at the most suitable age.
- 4. Individual interests :—
 

Compulsory service bears hardly on individuals trained for higher pursuits and interferes with all calculations as to a young man's career.
- 5. Geographical considerations :—
  - a.* Voluntary service is the only possible system for a nation which is obliged to have a considerable number of men constantly on foreign service.
- 6. Miscellaneous. Compulsory service :—
  - a.* Is the only certain method of getting the large numbers required ;
  - b.* Is founded on the high moral principle of every man fulfilling his duty to the community ;
  - c.* Causes increased emigration and desertion ;
  - d.* Allows of territorial connection being more fully developed ;
  - e.* Ensures a greater number of men getting a military training, which is an excellent education ;
  - f.* Tends to ensure peace by enabling us to train every man for war ; but
  - g.* There may be a difficulty in providing enough officers for the number of men available ;
  - h.* Voluntary service has never been fairly tested, and possesses still undeveloped possibilities.

#### DISCUSSION OF THE FOREGOING ASSERTIONS.

1. *Character and Feeling.*—As mentioned by "Boughey," the material point about this question of compulsory service is not so much whether it may or may not be advisable, as whether it may or may not be

possible. Here we are more concerned with advisability than with possibility; yet the two are in many ways so intimately connected, that the one cannot be discussed altogether apart from the other.

The first argument in my list includes two propositions, viz:—

*a.* Forced service is contrary to national character, therefore we can never adopt it. This is a question of "possibility."

*b.* Forced service is bad. This refers to advisability.

In both propositions it is assumed that what we usually style "compulsory" service is "forced" service. This is scarcely a justifiable assumption in our case. When an autocratic government decrees that men must serve, whatever the popular opinion may be, that is "forced" service; but when a constitutional government, acting on the expressed will of the people, institutes a system of personal liability, the matter is different. Although we still call the service "compulsory" for want of another word which would as briefly convey our meaning, we use the word only in a technical sense.

The question then is, Is it contrary to national character to consent to devote a few years out of our lives to the defence of the country? When the question is put in this form, every Briton will unhesitatingly answer "No! provided we see the necessity for it." Does it then become a question of absolute necessity, or should we get the same answer if for "necessity" we substitute the word "advisability"? We may imagine that the answer would be, "That depends on how far it might be shown to be advisable."

I have attempted to arrive at some more decided answer to this question by a consideration of what are believed to be the salient points of our character, and by every other method that I could conceive; with the result that I am convinced that it is quite impossible to lay down anything more definite, without its being a mere matter of opinion. Even this somewhat indefinite answer, however, furnishes sufficiently solid foundations on which to build some arguments. We may, at least, say, with certainty, that compulsory service is possible in England if it can be proved to be a necessity, or, perhaps, even if it can be shown to be very advisable. Englishmen, as is pointed out in the syllabus of Staff College lectures, would probably not be less patriotic than men of other nations, if our national existence were immediately threatened. This we all believe, and our belief in it is a tacit acknowledgment of the fact it is not national character, but the feeling of national security, which stands in the way of compulsory service. The danger is that our patriotism may sleep too long.

The second statement to be examined is, that forced service is bad. Wherein is it bad? Presumably in that the enforcement of liability would be likely to cause discontent, which would be bad both for the nation and the Army; possibly leading to some social upheaval in the one, and to an insubordinate, if not mutinous, spirit in the other.

Now, remembering the qualifications to be attached to the word "forced" in our particular case, we may leave the chance of a social



upheaval out of our calculations. A nation does not rise against the law which it makes itself to begin with, and afterwards retains the legal power of cancelling—as we practically do.

We are, then, reduced to a consideration of the effect on the spirit of the soldier of such a form of compulsory service as we might have in England. At many periods in our history men were forced into our Army and Navy in a very high-handed way—altogether different from what we should have under a more regular and legal form of compulsory service. The men thus forced were, we are told, chiefly those too poor to bribe or too lame to run; yet our victories prove that it was found possible to make efficient soldiers of them. We cannot have real efficiency and an insubordinate spirit in the same Army; and if such men, so obtained, became efficient soldiers, it is, perhaps, sufficient proof that a modern compulsory system would not result in insubordination. We claim to be a law-abiding race, and we have, at least, strong reasons to hope that if we have compulsory service, it will give us men who will serve us as well in every way as those we get now: men who will submit cheerfully to the law which has been passed with their own consent, or at least with the consent of their relatives and friends.

*The Theory that Volunteers make the Best Soldiers.*—It will be useful here to consider some of the arguments which have been based on this particular theory. Of these, the following extracts from the "Army Book for the British Empire" furnish a good example:—

"The British plan, no less well adapted to our circumstances, is the development of the voluntary system. . . . This country prefers the voluntary system and adheres to it, striving to develop it for its own sake and for the quality and good-will of the men it gives . . . .

" . . . . The recruit who enlists has, to begin with, a vocation to obey and a disposition to respect his superiors, nay, more, each one has latent within him, though it may be but smouldering, a certain fire impelling to devotion and duty, and it depends only on the skill of his officers to kindle the spark into flame. Whether before the enemy, on the sea, or in foreign garrison, the quality of spirit and tone which the voluntary system confers are of incalculable value; nor is it only so in the Regular Army: the Volunteer who gives willingly, as many a one does, more than the number of drills necessary to secure his grant is equally an exponent of its value.

" . . . . The voluntary system may be fairly represented as a higher development when compared with compulsory service."

The Army Book goes on to claim an analogy between emancipation from forced labour tenure, and the manner in which we now "compound for compulsory service by cheerfully bearing the cost of voluntary service," and winds up thus a brief sketch of the changes in our organisation:—  
 " . . . . all culminating in the present popular system with its favourable results, so largely due to the adoption of elasticity in the conditions of service and the adaptation of those to the circumstances of the people

. . . . the voluntary system may be said to have fallen on favourable conditions and will continue to serve us as heretofore."

This is the whole substance of the case for voluntary service, as stated in the Army Book. The estimate of the value of the voluntary recruit would, I am sure, edify our drill sergeants, who perhaps would not altogether agree with it.

Such language as this is apt to warm us into enthusiasm, and send us on our way elated with the feeling that the great nation we belong to must sweep all before it with its splendid voluntary system.

Somehow when we happen to require a few thousand mature men for some little expedition the system does not seem quite so splendid! I have no wish to deal with this question in anything approaching to a partial spirit—my only desire and object is to endeavour to estimate fairly the respective merits and demerits of each system; but I think that glowing language such as I have quoted, without an argument or any real attempt at a fair comparison in the whole of it, is apt to mislead, and does mislead; and that very many of what are intended to be the arguments in favour of voluntary service are open to the same charge.

Whatever fire the average "voluntary" recruit may have latent within him, smoulders also within the average recruit we should get under a compulsory system. No one seriously maintains that we get men of a "superior quality" now to what we should get if we had compulsory service—the exact contrary is usually asserted. "Good-will," "spirit," and "tone," I have attempted to show that we might hope to find to the same extent under either system. I cannot claim to have given any very clear demonstration of it—I do not think the matter admits of absolute proof—but I venture to hope that I have, at least, shown there seems no reasonable cause for doubt. The analogy claimed between forced labour tenure and compulsory service cannot, I submit, be established. The one depended on a hard bargain driven by the landlord and designed solely for his own profit; the other would rest on the people's expressed will, and its object would be the greatest good of the community.

The "favourable results" of the voluntary system; the "favourable conditions" on which it has fallen, and the probability that it "will continue to serve" our needs, it is my business to examine here, and it is too soon to express an opinion on them. Whether "the voluntary system may be fairly represented as a higher development when compared with compulsory service" is a matter of opinion.

It is interesting and instructive on this point to compare with the Army Book the following extracts quoted in the Prize Essay of 1875:—

"What does this system of 'voluntary' recruiting, which we are asked to believe is the only system suited to our highly-developed political and moral feelings, mean? Simply this, that people who have sufficient means, instead of being required to pay their just debt to their country in their own persons, are allowed to hire others, who have little choice but to accept this offer, to expose their persons in their behalf. No less lofty principle than this, it seems, can satisfy the highly-developed consciences of the English people. The moral fastidiousness displayed is only

surpassed in China, where, it is said, men may procure substitutes for the gallows. . . . In the name of common decency, let us cease to put it forward as a national distinction to be proud of—a practice entitling the people who employ it to look down, as from a lofty height, on the nations who expect each capable citizen to bear his share in his own and his country's defence."<sup>1</sup>

The Professor might perhaps have scored another point by showing how, if there be anything to admire in the system of hiring a fellow-countryman to fight in one's stead, the old "mercenary" system of hiring foreigners to do so was still more patriotic and admirable. Another extract quoted in the same essay is as follows:—

"Les volontaires," says Machiavelli, "ne sont pas les meilleurs d'une province, au contraire ce sont les pires; parce que s'il y en a de scandaleux, de fainéants, de réfractaires, de libertins, d'échappés de la maison paternelle, de blasphémateurs, de joueurs, en un mot, de mal élevés, ce sont ceux-là qui veulent aller à la guerre, et tous ces défauts font une forte méchante milice."

When a question admits of such contrary opinions as this, it can scarcely be said to have been fairly represented by the Army Book.

I have assumed that the statement that "forced service is bad" suggests only—so far as civil life is concerned—a social upheaval, and I have ventured to dismiss that suggestion somewhat curtly.

There is, however, another possible danger, suggested in my contention that a law made by the people can be cancelled by the people. Evidently if there were any probability that the nation might at any time withdraw its consent to a compulsory system, it would be worse than useless to adopt that system. We must remember that it is not enough that there should be a temporary necessity—or advisability—for its adoption, but that these must be of a nature which will increase rather than decrease in urgency.

Now, to sum up, the truth about this matter of "national character and the spirit of our institutions" appears to be that we dislike military service, not so much as military service, but because we see no necessity for submitting to the discipline which, it cannot be denied, must always be somewhat distasteful to any man. This belief in the absence of necessity—founded on a long immunity from invasion, trust in our Navy, want of knowledge of the horrors of war, and a failure to understand the conditions of modern warfare—is so very strong that the people will never be brought to consent to compulsory service merely to obtain comparatively unimportant benefits. The advantages offered must be very great, the necessity very real.

In this we show no extraordinary peculiarity of national character. The militarism of other Powers is the outcome of necessity; they have not adopted a compulsory system merely because they prefer it. The great danger in this waiting on necessity is that the people may refuse to see it until it is too late. They do not understand the rapidity with which war moves nowadays.

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<sup>1</sup> "Political Essays," by Professor Cairnes.

Lastly, once the necessity were recognised, and the system adopted, there is nothing in our national character which would prevent its working satisfactorily; it would be, so to speak, a higher development of the compulsory system, since it would have so much of the voluntary element in it; but it would probably not long survive the necessity which created it.

The arguments founded on individual characteristics must now be examined. Perhaps the most remarkable feature of these is the way in which one assertion contradicts another. The advocates of voluntary service first point out that, as the men who enlist under that system belong to the most worthless social class, the loss to industry is reduced to a minimum. They then proceed to insinuate that it is a greater advantage to the Army to get these men who, outside it, are comparatively worthless, than to get men of a better social class, who, we are to understand, would not have that desire to serve which the former have—that “latent fire” from whose smouldering existence the Army Book claims so much.

The advocates of compulsory service flatly contradict this, and assert that the better classes would supply better soldiers.

Thus it appears that there is a tendency to make capital out of individual qualifications in favour of whichever system our affections incline to; and there is a consequent over-statement of the case on both sides.

We must ascertain:—

- a.* The moral and physical value of the average man who enlists under the voluntary system; and how far his enlistment is the result of a desire to serve.
- b.* Whether he is in any way especially likely to make a thoroughly efficient soldier.

We may then compare the standards of military efficiency likely to be attainable under each system of enlistment, and, finally, attempt to balance between any gain in efficiency and any loss to industry.

Machiavelli's estimate of the causes which induce men to enlist voluntarily has already been quoted. A more modern summary of these causes, contained in the syllabus of Staff College lectures, is as follows:—

- a.* Necessity, *e.g.*, want of work.
- b.* Wish to leave home, owing to troubles with relations or with the police.
- c.* Desire to serve and to see foreign lands.

The proportion of our recruits which we owe to each cause is not stated, and is impossible to ascertain; but, judging by the appearance of the men on enlistment, and by the manner in which the supply tends to vary with the demand for labour, it is fair to assume that the majority of those who enlist do so because, at any rate at the moment, they are unable to earn a living in civil life; while the number of those who enlist purely from a desire to serve is small.

As regards those who cannot agree with parents or police, it need

only be said that they are likely to find their superior officers equally difficult to get on with.

Now, any system of compulsory service which we might adopt would bring into the ranks men with a desire to serve, as well as those without, and the fact of no option being allowed would not quench a really strong natural liking for the life. Many of the men "with a desire to serve" know nothing of the life beforehand, and some of them change their minds after they have had a little experience of it. With these the "strong natural liking" is more imaginary than real, and whereas under our present system they find themselves bound for a long course of years, under the compulsory system they would not have long to wait for release. Thus, granting without argument that men with a liking for the life make the best soldiers, it would seem that, so far as this advantage goes, one system of service is as good as the other.

As regards the other qualifications of men who enlist from necessity—that is, the majority of those who enlist under the voluntary system—the author of the Prize Essay of 1875 has formed a very low estimate, attributing their failure in industrial pursuits to "some physical, moral, or intellectual defect." With this estimate very many to-day agree, and point to our recruits in justification of their belief. When, however, we see these same recruits after they have completed a few years' service; when we read the records of what they have done whenever they have been tested,—we are forced to conclude that, though the average recruit may be justly described as a weedy stripling, he still has in him the qualities necessary to make an efficient soldier; it only requires time to develop them. It is fairer to draw our conclusions on this point from regiments in India or the Colonies, with an average of four or five years' service, than from regiments at home with an average of one year. In my experience of regiments serving abroad, their officers, who ought to be the best judges, believe their men to be physically and intellectually capable of facing any troops in the world. If our better classes could furnish us with soldiers who would become in any marked degree more efficient than these, we can only say that the world has never seen their equal.

So far as I am aware, there is no screening of crime in the Service, and statistics seem to show that there is nothing seriously wrong in the moral nature of the men we get. Evidently, as regards these matters, there is a good deal to be said on both sides; and striking a mean between the different views, we may conclude that the men we get now<sup>1</sup> possess the necessary qualifications to enable us, given sufficient time, to make them into efficient soldiers; but it cannot be claimed that they possess

<sup>1</sup> It must be remembered that we do not now enlist every man who offers himself; on the contrary, very many are rejected annually. Although we are sometimes forced to accept men who are below the recognised physical standard, we only take these when there are good grounds for believing that they will soon attain to that standard; and it appears that this belief is invariably, or almost invariably—subsequently justified. Our present physical standard compares very favourably with that of other nations.



these to any especial extent. Men drawn from a better class would undoubtedly be physically and intellectually—possibly, also, somewhat morally—superior to them at the time of enlistment, and could be turned into efficient soldiers in a very much shorter space of time; but whether, after each had completed some three years' service, they would still be, to any marked extent, superior, is open to question. One thing which appears probable is, that we should find in a better class a larger proportion of men possessing the qualifications necessary for non-commissioned rank. For the rôle of private it is worth considering whether a youth spent in poverty is not in some ways a good training. A man so brought up is used to hardships, and expects to have to obey; our well-to-do classes are nurtured in a feeling of independence, which is somewhat antagonistic to the prompt and unquestioning obedience required from a private soldier, but which might well fit them for the responsible position of section commander.

So far as gain or loss to industrial life goes, we are here chiefly concerned with individual qualifications.

To procure employment, a young man usually requires to have some connection. If the work be of a nature requiring skill, he must usually have had, in addition, some opportunity of previous training. The young man belonging to the well-to-do classes starts life with a great advantage in these respects.

Very many of those born in extreme poverty may be equally willing and capable, if they could but find an opportunity of proving it. There are black sheep in the higher classes as well as in the lower, and, although perhaps in smaller proportion, the former are, if anything, the blacker of the two, since they have fallen under less temptation.

On the whole, then, remembering that supply at present considerably exceeds demand in the labour market, it is probable that if soldiers were drawn more from the better classes, employers would still be able to find the men they wanted amongst those from whom fate has withheld the opportunities they desire. This, however, would be truer as regards unskilled than skilled labour.

Before leaving this part of the subject, there is a consideration to be mentioned which, although it should properly have been dealt with sooner, it has been more convenient to defer until now.

There is strong evidence that the Army is unpopular in England, and some maintain that this proves that military service is contrary to our national character; yet I have ventured to claim that we do not dislike military service as military service, but because we see no necessity for submitting to it.

Why is the Army unpopular? Partly, I believe, because of the somewhat general belief in the absence of necessity for military strength; partly because the soldier is still looked on as an individual who is at the very bottom of the moral scale.

The truth of the first assertion can be ascertained by simply asking ourselves, Would the Army become more popular if we were in immediate danger of invasion? Rudyard Kipling has, in one of his



ballads, given an answer to this question, which clearly expresses the general opinion.

My second assertion will not, I believe, find very many indisposed to agree with it. When prisons were emptied, and thieves unable to run impressed to fill our ranks, the moral tone of the Army could not but be low. Public opinion changes somewhat slowly, and the shadow of those days clings round the Army still; so that many respectable people look on enlistment as a disgrace, and the barrack as a hot-bed of evil. That the soldier makes free use of somewhat objectionable adjectives must be admitted; but any man may easily convince himself that the vocabulary of the average civilian is equally well supplied in this respect. Too much drunkenness there still is; but perhaps if the whole of our civil population were paraded by orderly-sergeants at 10 p.m. daily, it would be found that the soldier was not very much worse than his neighbours in this respect. Moreover, temperance has been making great strides in the Army of late years.

That any real crime or vice exists in our barrack-rooms may assuredly be denied. Gentlemen who have won their commissions after years in the ranks, have assured me that they left them with feelings of respect, and even admiration, for the sterling good qualities of their late comrades. We no longer enlist gaol-birds and criminals, and the low estimate of the soldier's morality is founded on a lingering remembrance of days long since past.

Granting, however, as we must do, that the estimate, though false, is still very low, this furnishes no grounds for establishing a connection between the unpopularity of military service and national character. Convince the civilian that Private Tommy Atkins is as good a man, morally, as himself; that he has a man's work to do, and does it; an object in life, and fulfils it,—and the Army will cease to be unpopular. If this were not so—if the nation still continued to look on enlistment as a disgrace—then we might say that national character was opposed to military service. But let us imagine the regiment of gentlemen which has been proposed to have been raised, let us then ask ourselves whether respectable tradesmen, for example, would consider it disgraceful for their sons to enlist in that regiment; and I think we shall see that the unpopularity is to a great extent due to the mistaken estimate of the character of the men in the Army.

We have still to deal with the question of the advantage to be derived by throwing on the entire community the maintenance as soldiers of men who are “of comparatively little value in the social economy of the State.” The thoroughly worthless men, who were useless before enlistment, and return to uselessness in the end, are of little value as soldiers, and the burden of their maintenance would probably fall on the community in any case. It is open to question whether the Service would not be better without them. If it would, it is certainly no advantage to the nation to maintain them as soldiers; in prison or the workhouse they would at least have no power of doing harm.

*Those able and willing to work, but unable to obtain it, pay for their*

maintenance with their services, so the community loses nothing. But neither does it gain anything, because if the same number of workers were withdrawn from industry to serve these men could take their places.

As regards individual physical and moral characteristics, then, it would appear reasonable to conclude that :—

1. The low social value of the men we get now is on the whole due more to want of opportunity than of necessary qualifications to be useful. These men make efficient soldiers, but time is required for their physical development.
2. If it is an advantage to have in the ranks men who desire to serve, we should obtain this advantage to a practically equal extent under either system of enlistment.
3. The advantages to be derived from obtaining a better class would be chiefly a much more rapid arrival of the recruit at efficiency; while a larger number of suitable men from whom to select our non-commissioned officers would be available. A more rapid arrival of the recruit at a state of efficiency would enable us to shorten the period of colour service, and thus increase the number of men trained without adding to the number withdrawn from productive labour.

It may appear that I have tried to claim too much for the men we get now. I have no desire to do so, but I think that many are too prone to judge of them from their appearance as recruits, and do not take into account the high physical and moral qualities which time and careful handling bring out in them afterwards. Whatever the voluntary system should do for us theoretically, it is absurd to claim that in practice it gives better men than a compulsory system would, and this is what the Army Book appears to do. On the other hand, the advocates of the compulsory system appear to claim too much for the better classes they expect that system to give us. In my conclusions I have endeavoured to find the mean between these extremes, believing it to be at least nearer than either to the truth.

2. *Financial Considerations.*—So long as the size of our Army remains unchanged, the quantity of labour lost to industrial life remains the same, whatever our system of enlistment may be. There may be a difference in quality, but even this is dependent on the system of compulsion adopted. I have already made clear my opinions on the question of quality, which amount to this: that the loss to industrial life to be charged on this account to compulsory service would at most be small, and, taking into account the existing proportion between supply and demand in the labour market, it might be set down as inappreciable. The erroneous connection between compulsory service and an increase of numbers is chiefly responsible for the large claims made under this head.

As regards actual outlay on the Army, it is very doubtful if the adoption of a compulsory system would enable us to make any reduction. The nation would never consent to any system under which the soldier was not well paid, fed, clothed, and housed; and it is probable that in

these respects no standard lower than the present one could be fixed. So far as the home Army would be concerned, we might certainly reduce our recruiting staff; abolish bounties; and cut down such expenditure on show and glitter as is now found necessary for the attraction of recruits. We should still, however, have to attract volunteers for our Indian and Colonial garrisons; and the actual material required for uniforms, etc., would probably cost as much as now.

It has been suggested that we might abolish retaining fees for Reservists. A chief object of this payment now is to prevent emigration and desertion, and to ensure the whereabouts of the men being always known. The same precautions would appear to be necessary under a compulsory system, unless we adopted an extraordinarily short period of Reserve service.

It is doubtful whether our Volunteer corps could continue to exist side by side with a compulsory system for home defence. We might, therefore, assuming that we should not decrease our present strength, have to replace them with whatever number of Regulars might be considered their equivalent in value. It is probable that these Regulars would cost more than the Volunteers they replaced.

I shall presently attempt to show that, with a voluntary system, there is a tendency to economise overmuch in matters of *matériel* and training. We might hope that compulsory service would cause an alteration in this respect; which would, however, use up the amounts which might be saved in other ways. Thus it would appear that compulsory service would not be more economical than voluntary, as regards the Estimates; but that for the same money we might have a better-equipped Army, and, by adopting a very short period of liability, we might train a vast number of men. These would, doubtless, come forward voluntarily in case of invasion, even though they could no longer be legally required to do so. Given any urgent necessity we should have no lack of volunteers under the existing system, but they would be untrained, and there would be no time to train them.

3. *Training and Discipline.*—It is asserted that the fear of affecting the supply of recruits forces us now to adopt a system of training which is not sufficiently severe to make the men thoroughly efficient. In proof of this, our attention is called to the much harder work which the German recruit is required to do. Many believe that even the more severe training in marching which we have now commenced has increased, or will increase, the number of desertions and will cause a decrease in the recruit supply. There is probably some truth in these arguments. The soldier on service has to face great hardships and the most severe physical exertion, and much may be done by previous training to prepare a man for such a life.

Such training implies a good deal of disagreeable hard work, to which men may hesitate to voluntarily submit themselves. It may be said that the age at which we enlist our men would in any case make severe training inadvisable, and our long period of colour service makes it unnecessary. This is, no doubt, true; but it is an admission that with

our present system we must be content to maintain a man for seven years, during the first three of which he is more or less inefficient.

It is easier to mould a boy than a man ; and, as Professor Parks points out in his work on " Military Hygiene," " there is not only no loss, but a great gain by enlisting men early," so long as the State is prepared to bear the extra expense entailed in maintaining a servant for seven years who for half that time is unfit for the work he is being paid for. By enlisting men instead of boys of seventeen or eighteen, and by adopting a severer system of training, we might have a better Army for the same expenditure, and a compulsory system would certainly give us this advantage. Moreover, with our present system, there is a great danger of our miscalculating our available strength through not making sufficient allowance for the immaturity of many of our soldiers.

On the other hand, in the labour market a man is of greater value than a boy, and enlistment at twenty would cause more loss of labour than enlistment at seventeen. The inequality between demand and supply, however, would minimise this loss.

Perhaps we are unnecessarily fearful of the effect on the recruit supply of more severe training. Some little part of the unpopularity of the Army may be due to a belief that the life is an idle one, as the hardships of active service do not seem to discourage recruiting. Our new system of marching training will afford some test of the results to be expected from harder work.

It may be that the term " Whatever regulations may be best for the State " is intended to cover a possible reduction in pay, etc. This point and the question of less costly uniform I have already considered.

Undoubtedly there is much inconvenience connected with the manner in which recruits now dribble in, a few at a time ; the system of training is complicated, a greater number of drill instructors is required, and our home regiments must always consist of an agglomeration of unequally trained batches of men. With a compulsory system we might avoid these inconveniences to a great extent ; but the extent would depend somewhat on the system we might adopt. If that aimed, for example, at bringing in chiefly the unemployed, we might not be able always to find any given number on a fixed date.

4. *Individual Interests.*—Any system of universal liability should not affect individual interests to any serious extent. The period of service would be very short, and as it would affect all alike, there would be no individual handicap. Moreover, the fact that a young man would have to serve would be allowed for in making calculations as to his career. We should naturally have some judicious system of exemptions in the case of young men destined for such higher pursuits as would make any interference with their education inadvisable.

Age on enlistment would make some difference in this matter of individual interests ; no doubt it would usually be more convenient for a young man to complete his period of service before the age of twenty than to commence it after attaining that age. At the same time, so long as all were treated alike there would be no real hardship or loss. A

"limited or class" system might be different, but if it were chiefly aimed at the unemployed, there would practically be no individual interests of a nature to require consideration.

5. *Geographical Considerations.* — These considerations can be more conveniently dealt with in Part II. Here it is only necessary to point out that the necessity for garrisoning our Colonies and India very seriously complicates the question of compulsory service. The long period of colour service thereby necessitated, and the indirect nature of the people's interests in our over-sea possessions, makes it quite impossible for us to expect the nation to consent to compulsory service for the Army which would be required to serve abroad.

6. *Miscellaneous* :—

- a. Compulsory service would be the "only way of getting the large numbers required" if we decided to considerably increase our military strength; it is evidently not the only way of getting the number required to keep us up to our present strength. That it is the most certain method, and the most satisfactory as regards efficiency, and that it would give us greater strength for the same outlay and without appreciable loss to commerce or industry, there are sufficient reasons to believe.
- b. That there is a high moral principle in every man fulfilling his duty to the community is no doubt true, but it does not follow that every man can best fulfil it by serving as a soldier. We require a certain military strength to guarantee security, having once reached that strength no man fulfils a duty in increasing it. The man who gives a portion of his earnings towards the expenses of the Army may be doing his duty to the community just as much as if he served in person.
- c. Universal liability for a long period of years is a heavy burden and does tend to increase emigration; but, in the first place, would increased emigration be such a disadvantage to us? We are, perhaps, rather overcrowded at home, and men would go chiefly to our own Colonies where their labour would not be altogether lost to us. If the system adopted tended to promote emigration amongst the unemployed only, there would certainly be no disadvantage in this respect. Again, with very short periods of liability it would not be worth any man's while to leave the country to avoid serving.

If compulsory service brought about such a saving of expense as some claim it would, the lighter taxation would remove one of the causes which are responsible for emigration at present.

As regards desertion, under the present system the Government practically undertakes to furnish a certain number of men for a certain sum; every deserter has to be replaced,

and the amount left to provide for *matériel* and training is thereby reduced; the nation looks more to numbers, however, than to anything else, and so feels no loss. Under a compulsory system it would be recognised that for every deserter another man would be required to serve; this would tend to stir up popular feeling against desertion and thereby help to prevent it. The more the system adopted was founded on universal liability the stronger would be this popular feeling. The short periods of service which compulsion would allow us to fix, would also tend to reduce the number of deserters. With the above exceptions, compulsory service should tend to cause an increase in desertion, owing chiefly to harder work. The author of the Prize Essay for 1875 states that, if  $W$  represents work and  $P$  represents pay, the rate of desertion will always be in proportion to  $\frac{W}{P}$ . I have assumed that  $P$  will be constant, whatever system we may decide on; therefore, the increase in desertion should not be very great. The expense of finding men to replace deserters would, of course, be less, so that on the whole the nett result might be much the same as now.

- d. The advantages derivable from territorial connection are :—
1. Popularisation of the Army.
  2. Some slight saving of expense in sending recruits to join their dépôts, as they are enlisted in the neighbourhood.
  3. Payment and superintendence of Reservists is simplified, and the men are near at hand when wanted.

Although our main object in attempting to popularise the Army is to attract recruits, yet it is so advisable for many reasons that the Army should be popular, that this consideration would retain its importance even if the necessity for attracting recruits ceased to exist. The other advantages claimed are also worthy of consideration.

How far a compulsory system might favour the development of territorial connection would depend on the system chosen. The more limited the application of the principle of general liability the more difficulty there would be in arranging for territorial connection. We may assume, however, that the difficulty would never be greater than it is with a voluntary system, while it might well be less.

- e. In our system of training soldiers we aim at physical development, and we insist on smartness, punctuality, prompt obedience, and cleanliness. Such a training is an excellent preparation for a business life, and is a benefit both to the individual and to the nation.



With our present system of enlistment the number of men returning to civil life annually is about 30,000. If we had compulsory service this number would be considerably increased in inverse proportion to the number of years which we might decide on for our period of service.

If, then, we assume the value of a military training to the individual to be  $x$ , the advantage to the nation would amount now to 30,000  $x$ , and with an annual quatum of 200,000 men it would amount to 200,000  $x$ . Those who believe that military life is a bad moral training will perhaps claim that a considerable deduction must be made on this account. To them I would say: a boy is exposed to more temptation at a big public school than in his own home, yet we have no doubt as to which system of education is most likely to turn him into a useful man.

It is evident that in calculating the loss to national industries, and the disadvantage to individuals, likely to result from the adoption of compulsory service, we must allow something for the educational advantages of a military training.

f. That recognised military strength should be a great safeguard against attack is self-evident; and it is worthy of note that the possibility of an invasion of England has lately occupied the attention of certain Continental soldiers, who have expressed the opinion that it is not impracticable. It may be that foreign politicians would express the opinion that our present military strength was insufficient, merely in the hope of inducing us to pay less attention to our Navy; but a soldier would not stake his reputation on such a statement if he did not believe it. We may be quite able, as we stand, to meet any reasonably probable combination against us; but the wisdom of inviting attack by continuing a system which, in our enemies' opinion, leaves us weak, is open to question.

Of all the maxims of war there is none whose importance is more fully recognised than that the full strength of attack should be directed from the first against the decisive point. It is probable that the heart, and not one of the limbs, of the Empire would be the objective of a European enemy. It would be well that the people should realise what an invasion of England by foes that hate us would mean, even if unsuccessful.

g. There is some difficulty abroad in obtaining a sufficient number of officers for the millions of men who are ready to take the field in case of war. It is necessary to remember that a man taken from the ranks seldom makes a good officer; the best are those who, from childhood, have been brought

up in the habit of having others under them from whom they have a right to claim obedience, and to whom they must set an example. At present we have no lack of suitable candidates for commission; the available supply would suffice to meet any demand that we are ever likely to have. It would not be enough, however, with a compulsory system, to train only the number of officers required for the Standing Army; we should require to considerably increase that number if our Reserves were called out. Some previous training would be necessary, and we look to our Militia and Volunteer system to provide it, under our present organisation. Such training, especially with Volunteers, however, would not be sufficient to enable us to put these officers in command of units on service with any confidence in the results. The supply at present available for our Auxiliary forces is not sufficient to enable us to institute any high test of efficiency, and this fact detracts much from the value of a system which obliges us to place great dependence on those forces.

With compulsory service we could remedy this. If we continued to keep up Auxiliary forces we should be in a position to fully officer them, and to insist on efficiency. If we decided to abolish Volunteers, or Militia, or both, we could still fall back on some compulsory educational test—such as is now demanded from cadets, for example; or we might utilise and adopt the much-debated idea of a regiment of gentlemen privates as a training school for officers. For Indian and Colonial garrisons we should require Volunteers; and, for reasons which I shall presently give, it would be well that the home Army should be officered in the same way.

- h. The last statement to be examined in this part of my essay is that the voluntary system possesses still undeveloped possibilities. Since this statement was first made, very much has been done to attract recruits by making the soldier's life more comfortable. Now he is well fed, clothed, and housed; when sick he is taken much better care of than is the average civilian; when well he is not worked very hard, and every effort is made to provide him with the means of amusing himself in a healthy way.

As regards pay, he can certainly have more money in his pocket to spend as he likes than many a man who apparently receives much higher wages. I remember a case which serves to exemplify this fact. A private soldier was offered employment at 4s. a day; he accepted it, and took his discharge. Some time afterwards I met him, and he told me that he had never ceased to regret the step. He had been attracted, he said, by the difference in pay; but he

had forgotten to calculate that he would have to feed, clothe, and house himself, to pay his own doctor, and to spend money on other things which he got for nothing, or next door to nothing, in the Army. In all these ways the nation cannot be expected to do much more for the soldier; but there are still two directions in which something might be done.

In the first place, a very much shorter period of service for home defence, which would be necessary if we had compulsory service, might, perhaps, equally well be applied with our present system; in the second place, the principle might be recognised that men who have served faithfully for years should not be cast off with no provision—or too little—at the end of it.

A civil employer recognises that a man who has served him well for seven or eight years has thereby established a claim on him, and should not be cast off for no fault. The soldier not only has no claim on his employer after eight years' service, but, in return for a very small retaining fee he has to bind himself to throw up profitable employment, if required, at any moment during another four years. Moreover, this liability handicaps him in obtaining employment.

National wealth and the numbers required are two of the main points to be considered in deciding on the best system of maintaining an Army. There is a natural connection between enlistment for life and voluntary service, but the growth of military power abroad has forced us to follow suit to such an extent that we can no longer contemplate a return to the inelastic system of life service; even with our wealth we could not afford it. It would be still more impossible to make pecuniary provisions for soldiers discharged with seven or eight years' service; yet they are so handicapped in civil life that there is an element of injustice in our treatment of them, and we can never hope that men will enlist for a period which is for them the most inconvenient that could be chosen, unless they are driven to do so by necessity.

If we are to develop fully the possibilities of voluntary service we must either find some means of securing employment to men after their seven or eight years' service, or we must shorten the period of service very considerably. The former course has frequently been recommended; and if we continue to depend on voluntary service, we shall be forced ere long to make the Army the only road to such employment as Government has the giving of, and ex-soldiers are suited for. If this were done it is almost certain that we should have a supply of suitable men quite equal to our present needs.

By considerably shortening the period of service we should not handicap the soldier in his subsequent struggle for employment so much as we now do, and we might expect to find more men willing to enlist;

but we should be still obliged to have a seven or eight years' term for serving abroad, and we should probably suffer from a dearth of volunteers for this. The objections to a separate Army for service in India and the Colonies are considered in the next part of this essay; but while compulsory service for the home Army would, perhaps, encourage men to volunteer for service abroad, voluntary service for the home Army would probably have a contrary effect. The question of a further development of the voluntary system in these directions is too big to be treated within the limits of the essay, but we can make no true comparison between voluntary and compulsory service without alluding to the possibility of such a development.

*Deductions from the Foregoing.*

The advantages claimed for voluntary service are founded altogether on three arguments, viz :—

- a. That compulsory service means commercial loss.
- b. That our character would prevent the success of any other system.
- c. That those who serve under a compulsory system are unfairly handicapped.

The first of these arguments has practically nothing to stand on, once the mistaken theory of a difference in numbers has been disposed of. The second appears to be founded on a misconception of the causes which combine to set the nation against military service. The people would accept compulsory service to-morrow if they thought it necessary, and the system would succeed if they did. We do not want to serve, and we try to persuade ourselves it is because of some peculiar and beautiful trait in our national character; whereas it really is owing to a desire, which we share with every other civilised race, to shirk doing a thing we dislike until we are sure that we must either do it or face something still more disagreeable.

As regards the third argument, if those who serve are handicapped in the struggle for civil employment, we use our present system to cast the burden on those least able to bear it, or to resist it; if we had a limited conscription it would have practically the same effect. That those affected have nothing to lose is not the point, but that they would not lose more under compulsory service than they do under voluntary; in fact they would lose less, as the period of service would be shorter. If we had universal liability there would be equally little foundation for the argument as there would be no individual handicap at all. Thus it appears that voluntary service has no inherent advantages over compulsory. It has some disadvantages. For an equal outlay the nation does not obtain the same value. We are unable to get the number of men we require for a Regular Army of a size believed to be proportionate to our needs, and we are, therefore, forced to have recourse to a system of Auxiliary forces, which is unsatisfactory, owing to the impossibility of estimating their fighting strength. The resulting uncertainty leads to

constant fears for our safety, which develop into unbecoming and costly panics on slight provocation. Voluntary service is capable of further development, but the cost, and the benefits to be obtained, cannot be calculated here, and we must argue on the system as we find it. Compulsory service, on the other hand, would give us a better Army for an equal expenditure; would be certain in its working and independent of make-shift props; and would promote that confidence which is the only antidote for panics. Lastly, it would tend to secure us from attack by raising the estimate of our defensive strength which other nations form. The disadvantages attributed to compulsory enlistment either do not exist, or are not sufficiently marked to outweigh its advantages. Thus, so far as my examination has gone, the balance of advantage is in favour of compulsory service; but the difference does not appear to be sufficiently marked to justify us in hoping that the people might be persuaded to adopt it, assuming that our present strength is proportionate to our needs.

A system of general liability would give us a larger number of trained men than limited conscription would; as, getting a better nurtured and educated class, we could adopt shorter periods of service.

As regards the influence of numbers, the more we increase our strength the more marked would the advantages of compulsory service become. The system is elastic and would lend itself to any given increase of numbers, up to the total of those fit for service.

With voluntary service we have some difficulty in keeping up to our present establishment; and we could only increase it by adding enormously to our present outlay. We place much dependence now on the probable effect of national danger in causing men to come forward; but we may feel certain that the danger would have to come very close first, and that it would be then too late to train and organise the men, and to provide a sufficient number of qualified leaders. We may say that the voluntary system has the nation behind it as a Reserve—but it is a Reserve of recruits. A system of universal compulsion would also have the nation behind it as a Reserve; but it would be a Reserve of trained soldiers.

## PART II.

### COMPLICATIONS ARISING FROM PECULIARITIES IN OUR EXISTING ORGANISATION, ETC.

1. *Sea-power.*—It is necessary before all things that we should retain command of the sea, and the necessity that Continental Powers are under of developing their land forces to the utmost possible extent is a great advantage to us, in so far as it lessens their power of competing with us in this respect.

Notwithstanding this, we have of recent years seen some of these nations devoting considerable efforts towards the increase of their Navies.

The people of Great Britain are somewhat unresponsive when any attempts are made to create a greater interest in military questions. This attitude is, in great part, due to the fear that any increase in military strength might lead to a lessening of naval power; and the fear is

accentuated when compulsory service is proposed, owing to the mistaken connection in men's minds between that form of service and increased numbers.

Now, offence is the strongest form of defence, and this is especially true of a mobile force like our Navy. To keep our ships hanging about our coasts would be the least profitable way to use them; yet this would almost certainly be the result of a feeling of military weakness. In proof of this I may quote two facts. In the American civil war, McClellan's plan of campaign was ruined through the Government and people refusing to allow the force required at the decisive point to be removed from the neighbourhood of the capital. In the Royal United Service Institution, during a discussion on "The Mobilisation of the Volunteers," in July, 1893, referring to the possibility of a hostile landing being effected on our shores, Mr. Arnold-Forster, M.P., spoke as follows:—"There is one remedy, and one remedy only . . . and that is, to have an overwhelming naval force always in our ports or close at hand."

There is a remarkable parallelism between this opinion and the view taken at Washington in 1862. The strategy recommended by Mr. Arnold-Forster is exactly similar to that which ruined McClellan, it is based on a similar feeling of insecurity; and, if the people of England were in great fear of invasion, they would probably urge the same disastrous policy of keeping near home that force which could more effectively protect us by going forth to destroy the enemy at a distance.

For the full development of our sea-power we must have confidence in the military strength behind the Navy, and every "scare" shows that there is a general want of such confidence now. The true remedy is to find some means of increasing our military strength without increasing its cost.

Any addition to outlay on the Army might bring about a desire to reduce expenditure on the Navy, and would be very objectionable in that way as well as in others.

It is tolerably certain that if we wish to increase our military strength and still retain our present system of enlistment, we must be prepared to increase expenditure in much the same proportion as coal consumption increases when we desire to drive a ship at a rate above her natural speed. For this reason alone, so far as sea-power is concerned, compulsory service would suit us better than voluntary; and if I am incorrect in stating that no saving of actual outlay would be possible under a compulsory system, the advantage of adopting it would be still more obvious.

It is also worth considering whether the adoption of compulsory enlistment for the sister-service might not be a step towards a solution of the manning difficulty from which the Navy appears to suffer.

2. *Our System of Auxiliary Forces.*—In our Volunteers we have an Army of defence which does not in any way interfere with industrial life, and which, as regards its maintenance, is more economical than any other system which could be devised.



In addition to these advantages, the existence of the Volunteers tends to keep the Regular Army in closer touch with the people and to spread abroad a general interest in and knowledge of military science and military affairs.

The true *raison d'être* of an Army, however, is to fight, and it is by its fighting value that it must be judged.

What is the fighting value of our Volunteer forces? On this point it is quite useless to hope for a unanimous agreement. The data for any accurate calculation are altogether wanting; our Volunteers have never been tried.

The conditions of modern warfare, even in our peculiar situation, permit of so little time for preparation, that we must take the value of the force as it stands now.

Volunteers, individually, are apparently well up to the standard of the Line. Important, however, as skill with the rifle is, discipline and leadership are still more so; and in these respects Volunteers are not, and never can be, on a par with Regulars. How far they can be behind them, only the test of war can decide, and the less we leave to be solved in that dangerous way the better.

We may foresee all the probable political contingencies; we may calculate beforehand the course of action which is most likely to commend itself to our enemies; we may deduce the number of Regular soldiers which we require for a reasonable guarantee of success; but, when we have to decide how many of these we may compound for any given number of Volunteers, reasonable certainty disappears, and in its stead reign chance and opinion.

Since we cannot calculate the value of our Volunteer forces, we cannot determine what we should lose if they ceased to exist; but we could calculate on gaining a much needed certainty as to our real strength.

Perhaps the true light in which to look at our present system is this: that with voluntary enlistment we are unable to keep up a Regular Army which we feel to be a sufficient guarantee of security, and we therefore try to supplement that Army by Auxiliary forces of uncertain value.

Owing to this uncertainty we suffer from periodical "scares," which, in addition to being often costly, are unbecoming to a great nation, and lead to a deterioration in national morale. Worse, we may discover too late that our fears were well founded.

Whatever the value of the Auxiliary forces may be, it is well that we have them; we should otherwise be deplorably weak; but is it advisable to continue a system which requires such props? Would it not be wiser to adopt one which could stand by itself; which would enable us to gauge exactly our powers of resistance; and which would lend itself to any increase of strength that we might judge necessary?

That the adoption of compulsory service would necessarily be a death-blow to the Volunteers is not quite certain.

There is no reason why limited conscription should have that effect. I cannot, however, see that it would be advisable, if we had compulsion,

to continue the Volunteers as at present organised. Whether it might not be advisable to do so with a somewhat different organisation is quite another question. If we adopted general liability with a very short period of Reserve service, we might reasonably expect to find many men willing to join Volunteer corps; or we might make their doing so a condition of release from the Reserve.

We should thus have fully-trained men in those corps; and we might, by a judicious use of our powers of compulsion, arrange to have trained officers and non-commissioned officers instead of those we have now, who, notwithstanding their many merits, can never be more than amateur soldiers.

With such a system, colour service might be regarded as a sort of necessary education for the young men of the nation in a profession which circumstances might at any time make it necessary for them to adopt.

What I have said about Volunteers applies also to a great extent to the Militia, with the exception that the latter is undoubtedly a better trained and better officered force.

It is, however, much more costly, and its value is also somewhat uncertain.

With compulsory service we might treat the Militia in one of three ways, viz., (a) abolish it; (b) apply the compulsory system to it; or (c) improve it on the lines suggested above for Volunteers.

3. *Indian and Colonial Garrisons.*—For the garrisons of our over-sea possessions we must have comparatively long periods of colour service. This fact, coupled with a, perhaps, exaggerated belief in climatic dangers, is always considered, and, no doubt, rightly considered, to make it impossible to have compulsory enlistments for service abroad in time of peace. The only remedy, if we adopted compulsory service for home defence, would be to keep up two separate Armies. This is objected to, chiefly on the grounds that an exclusively colonial Army would deteriorate to a serious extent. Now, we believe that long periods of service abroad under our present system tend to improve officers and men, rather than otherwise. Why, then, should an Army maintained altogether for foreign service suffer in efficiency? The matter is very fully considered in the Army Book, in which the difference in results is ascribed mainly to the periodical relief, under the existing system, of regiments serving abroad.

The effect of this periodical relief is thus described:—" . . . the essential thing has been done; the headquarters has been brought away, and with it the law, written and unwritten—the undefinable 'customs of the regiment'; a new headquarters has taken the place of the old, carrying its own healthy traditions with it; the moral atmosphere is more or less purified; and a uniform high tone spreads itself through all fractions of the Army, wherever serving." This change of headquarters, however, although "essential," is not the only thing necessary. The following is a summary of the reasons for the deterioration of an ex-

clusively colonial Army, or rather "local" Army, as explained in the preceding paragraphs of the Army Book:—

1. Local troops become conscious of a feeling of inferiority, arising chiefly from their not being called on to fight the battles of England on the battle-fields of Europe.
2. Jealousies and divisions arise between local troops and those not coming under that definition.
3. Local troops suffer from the want of an infusion of fresh European notions and feelings, and a vigorous system of European discipline; especially in a climate like India, where, according to statistical statements, the European constitution deteriorates gradually and surely in increasing ratio.

Other objections to the system, founded on the organisation of the old local forces in India, were:—

- a. The disadvantages of dual control.
- b. That the local troops, including the officers, were not available for general Imperial service; while India could not be sure of Imperial aid when she required it. Finally, in favour of abolishing the local system, it was urged that the officers of Imperial service troops, to a great extent, lost the advantage of the excellent training and the experience derivable from occasional periods of service abroad.

The system of local troops, on the other hand, had certain advantages, such as the saving of expense in reliefs, etc.

These we need not delay to examine here. The great advantage we are concerned with is, that a system of local troops for colonial defence would permit us to considerably reduce the periods of service for men enlisted for the home Army. Such an advantage, alone, is enough to justify a reconsideration of this question of separate Armies.

We have no difficulty in obtaining officers who are willing to undergo periods of service abroad; the supply exceeds the demand. It is the officers who really make the tone of a regiment, and on whom depend the measure of its efficiency.

Steam and the Suez Canal have brought India and all our Colonies very much nearer to us than they used to be, thus promoting more frequent intercourse between us; to a great extent Europeanising our distant possessions, and even, in a great measure, doing away with the ill-effects of climate by permitting of frequent changes of air. In a word, since it was determined that a local Army was a mistake, the conditions of life in our foreign possessions have so altered that many of the old arguments have lost much of their force. Cannot we make use of these changed conditions in devising a system which would enable us to obtain the advantages, while avoiding the disadvantages, of keeping up two Armies? Each foreign battalion might be linked, as now, to a home

battalion, with a regimental system as at present for the officers. We might interchange the garrisons of India and the Colonies as we now do. By fixing, say seven years, as the period of service abroad, we should have a constant infusion of fresh blood, of fresh European ideas, and we should avoid the ill effects of climate. Men for service abroad might be trained at home, as they are now; re-engagements into the home Army from the foreign, or *vice versa*, might be permitted; also exchanges between re-engaged non-commissioned officers. Furloughs, with cheap passages, might be arranged. Reserve men of foreign service battalions, who would spend their period of Reserve service at home, should be held available for service anywhere, and with either the home or foreign battalion.

By such means we should be able to avoid what, we are told, were in the past the causes of the deterioration in the old local forces. There would be no more duality of control than now. Our home Army would, in case of war, be liable to service in India or elsewhere, as it would have to be in any case. Our foreign Army, under the orders of the Imperial Government, would be liable to serve in defence of any of our possessions, and might be called on to fight on European or any other battle-fields, in accordance with Imperial needs.

Finally, our officers would have the same benefits as now of experience of service abroad.

There is yet one difficulty to be considered. Should we find it harder than it is now to find recruits for this foreign service? The system we might adopt for recruiting the home Army would probably affect this question. Voluntary service for very short periods at home might attract intending recruits so much, that it would become necessary to offer considerable inducements to serve abroad. This would be a serious objection. Compulsory service at home, on the other hand, would be less likely to have such an effect, and might even encourage men to volunteer for service abroad. As a nation we are not averse to leaving our native land for a few years, if we can do so of our own free will, and with some hope of bettering ourselves. Probably the same advantages now offered, with some arrangement to find civil employment for men leaving the colours with a good character, would be found to be a sufficient inducement. It may be objected that we are at present able to find recruits for service abroad without giving any promise of civil employment afterwards. This is true, but it has been already found advisable to take steps to provide as many as possible with employment on leaving the colours; and there seems good reason to believe that we shall have to do much more in this way ere long. Men enlisted for very short periods would have no claim to consideration in this way. It is those who serve for seven or eight years who are unfairly handicapped, and it would be better for us that half the Army only, instead of the whole of it, should have to be provided for on return to civil life.

What view our fellow subjects in the Colonies might take of this change I cannot attempt to enquire here. No doubt we owe them a duty,

but it is difficult to see wherein they would suffer; and it would be unreasonable to expect us to run risks at home which we might avoid without detriment to them.

4. *Our System of Government.*—I have already expressed the opinion that, if we once decided to adopt compulsory service, our popular form of government would favour the development of thorough efficiency; with so much of the voluntary element underlying the system, there would be an absence of the feeling of being forced.

Party government is, perhaps, not very favourable to efficiency. It promotes a competition in economy which is scarcely healthy where national defence is concerned. Theoretically, military efficiency should be treated like foreign policy—parties should combine to put security first and economy after it. Practically, alas! discussions on the Army Estimates do not disclose the existence of such combination. The people look more to the number of men we have than to the state of preparedness for war. When they see that 100,000 men exist on paper, they believe the whole of that force could be landed, all ready to fight, anywhere within a few hundred miles, in a week or two.

The result is natural. The great object is to find a sufficient number of individuals who will pass as men; training and *matériel* are of secondary importance to a "surplus."

Would a compulsory system of enlistment be any remedy for this? Would it not—the men being obtained at less expense—lead to the amount saved being used to swell the surplus, instead of being devoted to providing *matériel* and increasing efficiency? Perhaps it would; but, at least, we should not be less prepared for war than we are now, and we should gain a surplus. We might, however, hope that there would be, with compulsory service, an increased interest in, and knowledge of, military affairs, which would result in the people looking beyond mere paper numbers. Now the citizen pays, and thinks his duty is done, and the matter ended. With an element of personal liability thrown in, he might be disposed to be more critical.

I have now set forth, to the best of my ability, the strong and weak points of each system of service. In dealing with a subject so far-reaching in its nature, and affecting so many different interests, one is often tempted to stray into bye-paths which, though not quite out of bounds, are yet too far from the broad road which leads to definite conclusions. For example, one desires to enquire into the possible effect of a change from our present system on questions like Imperial federation, the growth of socialism, the relation between capital and labour, etc.

It appears to me that, on the whole, the connection between the system of enlistment and such questions as these, is scarcely close enough to justify an enquiry into it here; and I have endeavoured to confine myself to matters bearing more directly on the main consideration, which is, in the words of the Localisation Committee Report of 1872, "Not what is best for the efficiency of this or that service taken alone, but what is best for the military interest of the nation."

## PART III.

## CONCLUSIONS.

Under this head I have but little to add to what I have already said. The author of the Prize Essay of 1875 claimed to have shown that voluntary enlistment never was, and never would be, a success. I believe it to be quite impossible to prove anything so definite, without being given a certain fixed military strength as a basis for our arguments. Voluntary service gives us an Army; until we know that this Army is too weak to guarantee our national security we cannot say that voluntary service is a failure.

It may be the most expensive system; it may be incapable of giving us a really strong Army; but so long as it gives us what we have need of, so long as the people are prepared to bear the expense, no man can say that it is necessary—even that it is a duty—to change to another system.

The question is, Does voluntary service give us what we need? I commenced this essay with a statement that we do not know what we need, and I see no reason to alter that statement. Those who are responsible have, no doubt, given full consideration to the subject; but the people know little of their true opinions. One of the drawbacks of a popular form of government is, that—since power rests with the people—the conditions which should guide decisions require to be generally known, and such publicity may, for political reasons, be unwise.

I can only judge by what I see, and that is this, that we are unable to trust to our voluntarily enlisted Army alone, and we are forced to supplement it with Auxiliary forces; that we are, and must always be, uncertain as to the value of these; and that not knowing either what we really need, or what we really have, we are in the very uncomfortable position of a perpetual hesitation between two stools, with the danger of falling between them ever before our eyes. We fear to increase our military strength, lest we should thereby add to our burden; we fear to leave it as it is, lest some disaster should befall us. Some pooh-pooh the idea of danger; others, equally worthy of our confidence, pray that they may not live to see the calamities which they cannot persuade us to take measures to avert.

Is voluntary service responsible for this unsatisfactory state of affairs? We cannot tell, until our minds are set at rest as to whether the make-shift props with which the system is supported now, are necessary or not. While we have to place any dependence on them we shall always be in doubt until war has taught us their value; we shall always be in fear of the lesson which it may teach us.

There is but one remedy. Let the question of the strength which we require for a reasonable guarantee of security be thoroughly threshed out until we are convinced of the accuracy of the conclusions arrived at. Let us then calculate what such strength will cost under each system.

Finally, let the nation decide which burden is the more grievous—military service or taxation. Parties must agree and combine to enlighten the people—not to blind them.



If the difficulty of calculating the true fighting value of our Auxiliary forces be found insurmountable, we must replace them with Regular troops. If the nation cannot afford to do this with a voluntary system, then it must adopt compulsory service.

Our rulers, the people, must be educated as to what are the true ingredients of military success, as to the value to us of the possessions which we have to guard, and as to the results of defeat. They must know the risks they run, and the interests at stake.

That we should, at least, gain more than we should lose by adopting compulsory service, I believe to be beyond a doubt; there appears to be little against it but a more or less mistaken sentiment. Sentiment, however, can never be ignored in human affairs; and, if we are safe as we are, we must bow to it. On the other hand, if we are in danger, we can safely trust to sentiment fleeing before a stronger power—the first law of nature, self-preservation.

If compulsory service can be shown to be necessary for security, the nation will accept it—will gain by adopting it—and the system will work as well, or better, with us than it does with our neighbours.

Let us no longer trust the safety of the world-wide Empire, of which we are so proud, to blind chance, but resolutely determine to show that we are the children of Wisdom by seeking her advice—to justify her by following her precepts.

We may rest assured our action will be justified by events, and by those to whom we hand down our greatness.

## THE FORMATION OF AN ADEQUATE RESERVE OF TRAINED SEAMEN.

*By Mr. H. N. SULLIVAN.*

Friday, May 14th, 1897.

Vice-Admiral P. H. COLOMB in the Chair.

The CHAIRMAN:—I have the pleasure of introducing Mr. Sullivan to you. He has written a very interesting paper on a very important and difficult subject. There is more interest in it, inasmuch as his father, the late Sir James Sullivan, initiated our present system.

### LECTURE.

THE present time is a favourable one at which to call attention to any weakness in our national defences. There is an ominous cloud in that part of the political horizon usually associated with the gathering of storms. At such a time there is a chance of a Government giving due consideration to proposals for adding to our country's strength, as party spirit is for the moment sunk in the general desire for security, and the mind of the public is open to the consideration of such matters.

Any Government is, I believe, ready enough to grant what is necessary for the safety of our country, if only they feel that the stream of public opinion is with them. Almost all our great naval reforms have been the result of pressure from without.

In a paper read before this Institution in 1875, by the late Sir John Coode, on the still neglected subject of a strategic and refuge harbour on our Eastern coast, he said:—

“The apathy and indifference of the mercantile community can only be accounted for on the supposition that they are so engrossed with commercial pursuits that, in so far as they give to such matters any consideration at all, they place their reliance upon the Government for doing all that is requisite; whilst there is reason to apprehend that, on the other hand, the Government, in the absence of any representations or pressure from without, have hitherto allowed matters to drift along to a point at which the subject assumes an aspect of such importance as to demand prompt and grave attention.”

The members of the mercantile community are slow to awake to matters so greatly affecting their interests as our naval supremacy, but once alarmed they are not backward in expressing their views, and they have enough political power, when united, to obtain from Government any measures deemed necessary for maintaining that supremacy.

The subject of the manning of our royal and of our mercantile marine calls for prompt and grave consideration, and the mind of the mercantile community is, I am persuaded, now ripe for agitation.

The reasons for my venturing to address an audience of naval experts on the manning question are the following:—

My father, the late Admiral Sir B. J. Sullivan, made one of the chief objects of his life the furthering of the effective manning of the Navy. The present small Reserve was the result of his continued exertions. The scheme adopted, though based on his plans, fell far short of his ideas. It is only during the last few years that Government have even begun to give the men the training suggested by him in our men-of-war.

It has occurred to me that one of the best means of bringing before the profession and the public the urgency of the manning question is to reproduce some of his arguments which thirty-seven years ago impressed on the Government of that day the need of reform in this direction, and obtained from them the small concession referred to. The alterations in weapons since his day, and the greater rapidity with which events now succeed each other, have, I think, increased the force of those arguments.

Having, myself, for the last twenty years moved in mercantile and shipping circles, I have some acquaintance with the views of business men on the present state and requirements of our mercantile navy.

For many years, ever since 1846, Sullivan had endeavoured to call the attention of the authorities and of the public to the necessity for a Reserve of trained seamen, in order to do away with the need of keeping up such large armaments during peace, a practice which only led France to do the same. This increased her opportunities of training her seamen for manning a war fleet, as, by her excellent system of passing them into her Reserve, they were always available. But any extra men we took for emergencies were afterwards dispersed and their training thus lost to the country.

Soon after his appointment to the Board of Trade, Sullivan brought forward his views in a paper which he laid before the President, Lord Stanley (in May, 1857). No one, however, supported the idea, except Captain Brown, R.N., the Registrar of Seamen. With the consent of Lord Stanley, Sullivan sent his paper to the First Lord of the Admiralty, who ordered it to be printed. It was chiefly through this paper and the subsequent support given to it by Captain Brown that the Manning Committee of 1858 was appointed. The scheme of Reserve subsequently adopted was nearly identical with Sullivan's proposal, only on a much smaller scale. It omitted the chief aids to its success which he had recommended, viz., the pension funds and school training-ships, and did not give the men enrolled a proper training in *our men-of-war*. The men

were given a retaining fee of £6 per annum. In later years a pension of £12 at the age of sixty was added—a most inadequate one.

The practical working of the plan eventually decided upon was undertaken by the mercantile marine department of the Board of Trade, with which Captain Walker was immediately connected. Sullivan had little to do with it beyond the important work of origination.

The Secretary of the Board of Trade, Mr. (now Lord) Farrer, most cordially assisted in organising the scheme. To him and to Captain Walker—after Captain Brown—is due the chief credit of preparing the regulations and carrying out the wishes of the Admiralty and of the Government. On the other hand, the principal work of bringing it before the seamen and helping to make it popular was undertaken by Captain Brown, and to him in a great measure is due its success. He afterwards received a step in rank and the civil C.B. for his services, but Sullivan received no recognition of the part he had taken in giving the country this extra means of defence.

The following were the main points of Sir J. Sullivan's scheme :—

1. The attachment of our seamen to the country by establishing a pension fund from their own contributions, under Government control and guarantee.
- 2a. The formation of a naval reserve by enacting that in future all apprentices and young men joining the mercantile marine should serve a certain time for training in the Royal Navy, and, further, be liable to serve in it when called upon. (This he called the Compulsory System.)
- 2b. The formation of a Reserve of VOLUNTEERS from mercantile seamen and fishermen to serve for training and afterwards when called upon. (The Voluntary System.)
3. In addition to either plan, the establishment of school-ships for the sons of seamen and others destined for the mercantile marine, who would join the Reserve on like conditions. This would be a means of aiding the families of deceased and deserving seamen by the free education given to their boys.

His object was two-fold: the improvement of the even then deteriorating merchant seaman, and the strengthening of our Navy.

The direct result of this paper was the Manning Committee of 1858, and this was followed by the Commission on Merchant Shipping, 1860, and that on the Board of Admiralty in 1861. Sullivan was examined for fully three days by each committee. He began his evidence by showing the inadequate way in which our Navy had been previously manned. He showed from the experience of the Russian war that we were then wholly without means of fitting out a war fleet in an emergency; that, had we, in 1854, gone to war with France, many of our newly-commissioned ships would have been unfit to cope with those newly commissioned on the French side, owing to the superior Reserve system of the latter; that, but for the advantage we possessed in 1854 in steam power, our ships, with

their raw crews, could hardly have safely met those of the Russians, had they come out to meet us. These opinions were held by many of our naval officers. One officer stated his ship could not have gone into action for six months.

Such was the state of our Navy in those days. He showed how, in recent years, we were more than once at the mercy of the French, owing to the unprepared state of our Navy as compared to theirs.

He then propounded his scheme for a Naval Reserve. He believed that, though the continuous-service system gave us a splendid peace Navy, it alone was not calculated to give us a good war Navy. There was then no means of entering men temporarily for war-time, so they had to be entered for continuous service. When peace was made, and it was desirable to reduce the number of men, those entered on such a system could not be turned off. Extra men entered for war should be such as could be discharged in time of peace; but these casual men should be entitled to more pay, or to some adequate pension to make up for the lack of permanent service. The continuous-service system shut out the mercantile sailor, the future war seaman, from service in the Navy during peace, and prevented our having a large body of men in the mercantile marine who had had the advantage of the training and discipline of the Navy. Sullivan said:—

“I have drawn up two plans. One I have called the compulsory plan, and I think it is the best. I do not say take all the seamen now afloat and make their service compulsory, but I do say if this country is to make its 170,000 seamen available for its defence (and I do not believe we are safe without), you must have the means of utilising every seaman for the service of the country when required, as other countries take their seamen. By no possible means can you remain the greatest maritime Power because you have the greatest mercantile navy, unless you have equal facilities for utilising your greater number of seamen. This can be done without any hardship to the men. Say that every boy who goes to sea (after a certain date) shall serve in the Navy a certain time, say from one to two years, for training. Then, that he should be liable for service in war when called upon, at sea, say, to the age of forty; for harbour service to, say, that of forty-five or fifty. For that service and liability he should have from the Crown, at the age of fifty, a pension of £20, in addition to the £10 a year from his own Merchant Seamen's Fund. I know that this will amount to a large sum, but I think the country would be no loser. I learned from a French officer that the whole of the French compulsory service is based on providing for a man at the age of forty-five, and he gets a pension from the State somewhere about the sum which our Government pays for 21 years' service in the Navy, *i.e.*, about £15 a year. If France, for the sake of her Navy, with her minor maritime interests, can pension her 100,000 men, who get their bread at sea, how much more can this country afford to pension its mercantile seamen, if it equally gets their services for her defence!”

## VOLUNTARY SYSTEM.

Sullivan said he preferred the compulsory plan, but thought it might be possible to get some men by a voluntary plan. He proposed to offer inducements to young men in the merchant service to volunteer, in hopes of getting immediately sufficient men to supply the then urgent need, pending the adoption of a more detailed plan; the reward to be the pension before mentioned. He would prefer a little periodical service, sooner than that the men should be trained and then sent adrift. *But at first they should receive at least six months' training in a man-of-war.* Out of the 50,000 or 60,000 men then in the home trade he would take 20,000 to 30,000 and make an immediate Reserve of them, so that the country might be considered safe. He said:—

“I would not limit it to 20,000; you want another 20,000 more.

Did I feel sure you could obtain the number of men required by voluntary enlistment from the home trade, I would prefer that to the compulsory system; but my great doubt is whether you can get them, and, therefore, whether you do not want the whole trade to serve. But, to get 20,000 men, you must take a large additional number on paper.”

When asked, “*Would you confine those men to the home trade?*” he replied:—“This might be done; but if you got volunteers from all trades you would have a body of trained men in the merchant service upon whom you could put your hand in England or in any part of the world.”

As to the value of the services of previously trained men, even though some time out of the Navy, when called suddenly to join a man-of-war, he said:—

“If 700 coast-guard men were collected from all parts of the kingdom and put into a line-of-battle ship, their previous service in the Navy would enable them so to drop into their places with good officers, that in one week that ship would be fit to go out and meet any French ship whose crew had been collected from their trained men, without any fear as to the result; and in the same way, with a body of trained merchant seamen who had served a certain time in the Navy, who had been well trained at the guns, forming a portion of the crew (the nucleus being well-trained men-of-war's men and coast-guard men), I should not fear that ship taking her place in the Channel one week after the men were collected on board. I would rather fight an action with such a crew than with some of the Baltic crews after they had been in commission two or three months. But what is very important, you want a disciplined body of men, accustomed to work together in a man-of-war, to fight an action. Men who would stand under fire in the field will require much more nerve and confidence in each other to stand to a ship's battery when concussion shells are bursting through her sides. You must not man your ships with men who are not accustomed to discipline and to gunnery.”



In considering the financial question, he said :—

"I was very much struck to find that we actually pay £25,000 a year for 275 Horse Guards. The three regiments only give 825 mounted men for the defence of the country *if it is invaded*, and the cost to the country is £76,506 a year. If we pay something like £90 a year for a single Life Guardsman, who is of service to this country if it be invaded, but who is of no use otherwise, surely £8 a year (allowing £4 towards pensions) for a man whom you can put into a line-of-battle ship is trifling in comparison."

"The objection might be raised to my scheme that, in the event of war, a number of seamen would be forced from the mercantile marine at a time when they would be particularly wanted in it. But, without an efficient Reserve, there would be a danger of our trade being shut up in our ports, an event which would be fatal to our country. The mercantile interest should agree to a proportion of seamen being taken for the Navy, so as to ensure the remainder going on with their trade."

"The compulsory plan would not mean impressment, merely an understanding that, if a boy went to sea, he would know he would have to serve a certain time in the Navy, with a liability to war service; and, in return, the State would provide for him in his old age, or when disabled. This would be no hardship, and would place seamen in a far better position. The scheme would probably not prevent one single boy going to sea. If he knew that at the age of fifty he would have a pension, in all, of £30 to look to, a better class of man would be attracted to the merchant service, who, with more at stake, would be more easily managed." Question: "*You are aware, probably, that the Queen has power to call upon the whole merchant navy for compulsory service? and that is open in your opinion to objections on the ground of injustice, which the plan you propose would not be?*"—"I do not see any injustice in any man in the country being so called upon, but I think my plan less objectionable, as by it the man would have a fixed remuneration in his old age. But another advantage would be this,—Supposing such an emergency to arise to-morrow: If you picked the seamen of Liverpool or London who had not served in the Navy, and, putting them into a ship at Portsmouth, sent them out to fight an action against a French ship, you would be sending them to as certain destruction as if you took the men of a raw Militia regiment who had just taken up their muskets and put them before a regiment of French Chasseurs. Therefore your present plan is valueless. I can hardly express with sufficient force what I feel on this point, but if ever we send out crews such as went to the Baltic in newly-manned ships, and they were put against newly-manned French ships, I do not hesitate to say that the French ships would destroy them. I am as sure of it as I am sure that we should have nothing to fear if we met the French ships with trained British crews. I think that those who say British sailors may be trusted without training talk nonsense. I believe that even with trained crews a future naval engagement might result in the floating wrecks of those two fleets

being found in the Channel; but if you send out ships manned with untrained crews, the result must be that the wrecks of *your* ships will be seen floating in the channel, and, your best fleet being destroyed, your ports would probably be blockaded, and you would lose the command of the sea."

"There has been too much tendency to undervalue the efficiency of foreign ships. I have served a great deal with the French Navy; I have lived on board of their ships; I have piloted them, and have probably been more with them than any officer in the Service; and, although as sailors in an emergency I think them inferior to our good seamen, yet as a trained body of men, with sufficient physical power and accustomed to discipline, I think that their Navy would be on such an equality with ours, that we should have hard work to beat them. We must not forget, even in the last war, when gunnery was not so important, and when the ships were manned with untrained seamen, that out of the last six frigate-actions with equal force, four, I think, were drawn battles; and in one or two of those actions, if the French had persevered, our ships might have been taken."

Wherein does the present scheme of a Reserve differ from that proposed by Sullivan?

You will have observed that his proposal of a Voluntary Reserve of 20,000 men was merely as a stop-gap, to give the immediately needed additional strength to the Navy pending the adoption of a far larger Reserve plan. But this has never since been attempted.

Then the further omissions were the absence, at first, of a reasonable pension, the neglect to establish school-ships—which subjects I touch upon later—and the absence of adequate training. It is only within the last few years that any of our Reserve men have been more than a few weeks in modern men-of-war.

The accompanying letter from the late Admiral Sir Astley Cooper Key not only justifies my claiming for my father the credit of originating the scheme, but shows that his anticipation of the value of the Reserve man of that day was verified.

Admiral Key had just returned from the summer coast-guards-men's cruise.

"70, St. George's Square, S.W.

"MY DEAR ADMIRAL SULLIVAN,

"June 7th, 1869.

"I endeavoured to find out from ———, who accompanied us on our late cruise, whether the Board of Trade gave you full credit for all you have done in establishing the Royal Naval Reserve; but a king reigns there 'who knows not Joseph'; and although he was aware that you were one of the originators of the force, he had not looked into the subject sufficiently to enable him to give you your proper share of it. I have been much surprised at their efficiency. The men we embarked (over 1,700), though by no means the cream of them, as too many are at sea at this time, formed a very fine body of intelligent seamen, our cruise with which was a great success.

"Ever your sincere friend,

"A. COOPER KEY."

Sullivan proposed that the men should be trained *on board a man-of-war, alongside our regular naval seamen*. The present system of drill is inadequate with respect to discipline, and the moral force given by it. The men are, for the most part, unacquainted with the complicated equipment of the ships they would suddenly be called upon to serve in. Out of 25,000 men, 590 served for a month afloat during last year's manœuvres.

Other faults of the present scheme appear to me to be the following :—Sir J. Sullivan's scheme provided a pension, in all, of £30 per annum at the age of fifty. This would be sufficient to give us a permanent hold on a seaman. The present yearly fee of £6, together with a pension of £12 at the late age of *sixty*, does not seem to me sufficient to do so. If war broke out, the mere enhanced cost of the war insurance premium on ship and cargo would be sufficient to give our carrying trade into the hands of neutral foreigners, who would at once buy our ships and tempt our seamen away by offers of high wages. At present, very many of our ships are sailed under foreign flags to escape the onerous conditions of the British laws. Without sufficient hold on the men they would go from us, as John Stuart Mill, W. S. Lindsay, and others have prophesied. It was this possibility which Sullivan foresaw, and which led him to propose the two pensions.

Mr. W. S. Lindsay, M.P., the greatest shipping authority of his day, in 1870 expressly alluded to this in urging an extension of the Reserve.

“We have no security that these men will be ready to serve in our fleets in the event of war. They have no inducement beyond their retaining fee, with which we have parted, and they have no pension to forfeit if not forthcoming.

“Nor should we be able to reach those of them who had entered the service of neutral Powers, without incurring great risk. If the United States formerly refused to deliver us our seamen sailing under their flag, it is not likely that they would now permit the right of search for men whom we call deserters.”

The objections that have been raised to any proposal for extending our Reserve are the following :—

1. We have bluejackets enough already.
2. The short-service men are not efficient.
3. The result of the French system is not such as to induce us to copy it.
4. The nation would not stand the cost.
5. The mercantile seaman is not fit to be the companion of our bluejackets.

Some of these objections have already been anticipated.

In the next war, the nation who is quickest in the field or on the sea will have an immense advantage. England is proverbially behind-hand at the first, but gathers her forces together later on. Under the present system of warfare, there may be no second opportunity

given to a nation for retrieving early mistakes. My father often said:—"If there was one man, even a second-rate man, as a permanent official responsible for the state of the Navy, and unable to put the blame for any laxity on his predecessors, he would not dare to remain in office under the responsibility without letting the country know what he considered necessary for our safety."

In view of recent additions to the number of seamen, it may be thought that there is little need for a larger Reserve; but let us examine the figures. The Estimates give 100,050 officers and men of the Navy and Royal Marines and 26,700 Reserve men; but last year's Estimates were for 119,550 in all, of whom 5,300 were boys still in training-ships. As these boys and the men voted in addition this year cannot yet be counted effective naval men, we have not at this time much more than 114,000 men to draw upon, should we unhappily have need of their services in war. By the last return I can find, the French Navy consists of 185,000 men; all of whom have served three years, or are serving in French men-of-war. As comparatively few of their Reserve go abroad, their men could be more quickly mobilised than our Reserve. Their fishermen, splendid sailors, are admirable for manning torpedo-boats and small craft. They know the pilotage of both French and English ports, and would not suffer from sickness on board torpedo-boats so much as our ordinary seamen do.

It may be interesting to compare the number of seamen we formerly had in times of peace with those in times of war. The figures given below are all I could procure. The numbers are those allowed for in the Estimates, but sometimes the men actually enrolled fell far short of these.

## NUMBER OF SEAMEN AND MARINES.

<i>England.</i>			<i>France.</i>	
A.D.			A.D.	
1760	70,000	War with France	1680	66,000
1775	18,000	Peace		
1782	90,000	War with France and Spain	1780	100,000
1793	45,000	Peace		
1800	120,000	War with France		
1801	135,000	War with France		
1802	130,000	War with France		
1803	{ 50,000	Peace		
	{ 50,000	added in June, for War		
1804	100,000	War with France		
1805-6	120,000	War with France		
1807	130,000	War with France		
1810	145,000	War with France		
1813	147,047	War with France & America	1814	120,000
1820-6	34,000	Peace	1824	65,000
1840	35,065	Peace	1836	90,000
1855-6	70,000	War with Russia	1846	113,000

1888	{ 62,400 20,000 Reserve }	Peace		
1896	{ 93,750 25,800 Reserve }	Peace	1896	185,000
1897	{ 100,050 26,700 Reserve }	Peace		

It is remarkable how, since 1820, the French sailors have always outnumbered ours. Since 1888 we have largely increased our permanent list, while France yet outnumbers us. Had we quadrupled our Reserve instead, we should, I think, have been in a stronger position for the same outlay.

With regard to the number of men allowed for in the Estimates, I would urgently ask if the country is satisfied with just so many Blue-jackets as are needed to man in peace-time our existing fleet, without providing an adequate Reserve?

Although experts differ on this very point, let it be supposed we have enough men for the war-ships now built, as well as for the subsidised merchant cruisers, and that there will be provided in future Estimates the raw material, at least, for manning vessels that we intend to build.

Where, then, is the allowance for emergencies and for supplying the waste of war? Let us examine into some of the possibilities we may have to encounter.

We might again, as we did once before at a critical moment, buy some of the ships building in our private yards for foreign Governments friendly to us. Have we men forthcoming for any of these?

In war-time we might capture some of our enemy's ships in a usable condition; but if we had no Reserve of trained men, how could we utilise these?

Sickness might break out in a fleet, as cholera did in the Baltic fleet. Sullivan shows in his journals how seriously that weakened our strength for a time.

Again, we employ our seamen to assist our land forces. A serious engagement, particularly a reverse, might cost us a large number of Bluejackets, and so cripple the efficiency of our ships. These are contingencies likely to occur at any time, and must be taken into account in estimating the number of men we should have at our disposal.

The next war we engage in may be one against great odds and, indeed, a fight for our existence. The ships surviving the first brunt of the war may be so damaged as to be for months practically non-existent, and the losses in men may be serious. Then the nation who has the best reserve of ships and of men will gain the day. I believe we should ultimately see a large number of our more or less obsolete war-ships, not to speak of our swift passenger and cargo boats, engaged. Whereas France has a large number of men behind her first fighting line to fall back upon, we have practically none. So that in a prolonged conflict we might get the worst of it. Am I putting an impossible case? I ask you naval experts to let our countrymen, and above all our shipowners, know your opinion on this matter

But, it will be said, "We have a Reserve of 25,000." True, on paper; but it cannot be expected that out of this number half will be available the first three months they are wanted, for they are more scattered over the world than French sailors. A large proportion of those nearest at hand would be absorbed by the subsidised merchantmen they were serving in, and other ships which would doubtless be taken up by Government. Many who happened to be abroad would perhaps be wanted to strengthen the crews of our men-of-war out there. But to prove how few Reserve men there are available for such a purpose, I venture to tell the following incident, which, I believe, will not be contradicted. In recent years an attempt was made to test the problem of how many Reserve men could be depended upon. Over a period of three months the merchant-vessels calling at the Cape of Good Hope only produced *eighty Reserve men*. These would not have sufficed to replace the men knocked up by the Benin expedition!

In saying we have only a peace complement of Bluejackets, I ask if it is true, as stated then in the newspapers, that at the time of the manoeuvres, a year or two ago, the speed trials of a new gun-boat at Portsmouth had to be postponed because a crew could not be got together for her?

Reckoning the contingencies I have enumerated, and guided by the estimates of several naval experts, such as Lord Hood of Avalon, Lord Charles Beresford, Lord Brassey, and others, it is not too much to state that we ought to have at least as many trained men at our disposal as other great maritime Powers have at theirs.

Again, we have abolished the privateer; but we have a much more effectual weapon now in the subsidised merchant cruiser. Our big liners, which carry the blue ensign and are manned with partially-trained Reserve men, are to all intents and purposes men-of-war. But, as we have lately seen, the foreigner has a larger number of steamers of high speed, and a vastly greater number of Reserve men, who are much better trained than our own. So, if we can man a few of our best merchant-ships, the foreigner can man every one of his as an armed privateer.

In the present day, it is not a Reserve of seamen only we want, but of engineers and of stokers also. A few of them have been enrolled in the Reserve, but not nearly enough. A stoker's life being a very trying one, a good pension would be a grand thing for him to look forward to, and he might be granted one even earlier in life than the sailor.

It is necessary to provide for the possibility of the loss of men in the engine-room (from casualty or sickness) seriously crippling the ship's efficiency, so that in war-time the staff below should be strongly augmented. Again, in olden days, a midshipman and a few sailors could bring home a captured ship. These would not be sufficient now-a-days. Engineers and stokers must be spared for the purpose, if there are ever again floating prizes. This is another reason for a larger engine-room complement. The repairs of damages, too, would fall on them, and so the question is likely to prove a serious one. Reserve stokers, serving for a period on board a man-of-war, would, I presume, be trained in arms, and from their slight acquaintance with machinery



would be likely to learn gunnery quickly. Drill, too, would give them the discipline necessary for active service. We want moral force in the engine-room and stokehole as well as on the gun-deck, especially, as we have lately learnt, ships will still be set on fire in action.

One eminent naval authority has objected to an increase in the Reserve on the grounds that we have not ships enough to train the men in.

I do not attempt to say whether we could reduce our number of long-service men, after providing a large number of trained Reservists; that is a question for experts. But how is it that the French manage to train nearly double the number of seamen we do?

One way of overcoming the difficulty might be to equip some of our less obsolete ships as training-ships. The use of such ships in war does not seem to me improbable; anyhow we should be forming a valuable reserve of modern small guns with which to arm merchantmen and to replace those damaged in our regular fighting-ships; I presume the working of very heavy guns could be left to the long-service men, of whom there would be always a certain number available, and the time and money necessary for training Reservists at our monster guns could thus be spared.

I take next the most important consideration of all, *the question of cost*. If my father's figures still good hold, £8 per annum for each Reserve man, we have, allowing a wide margin, say £500,000 per annum for the cost of 50,000 men; £1,000,000 for 100,000. I leave to experts to say if we had at command such a number of adequately-trained Reserve men, how many regular Bluejackets we could afford to cut out of our Estimates, according to Sullivan's idea.

But if no saving could be made in that quarter, the cost to the country for the almost absolute safety this Reserve would bring would be little. Our mercantile marine would be greatly benefited, and by the increase of British sailors wages would be spent more in England and less abroad.

Mr. J. T. Danson, one of the well-known Liverpool underwriters of the good old school, now retired, has recently published a little book, entitled, "Our Next War" (Blades and Co., London), in which he gives statistics of the rates of insurance premium during the old war. He shows that on some occasions, when the risks were greater, the premiums on voyages to America, Jamaica, Spain, the Baltic, Hamburg, and the Mediterranean ran up to as high as *twenty guineas per cent.*, sometimes even higher, although the average on all voyages over the whole time was 5 per cent. for the war risk only.

"This tax of 5 per cent. for the war insurance premium only on our sea commerce at the beginning of the old war in 1785, would have amounted to over £1,500,000 for that year. On our trade of the present day it would come to £36,000,000 (nearly)."

With an absolutely reliable Navy, and the means of manning it, no country would dare go to war with us; so that the small extra expenditure

needed is not to be calculated when looking at what the cost of a war would mean.

In addition to the ordinary Reserve system, Sullivan proposed the establishment of about a dozen school training-ships in our home ports. The lads, given free training in them, were to serve for a time in the Navy, and after when called upon, and to receive the same pension as the other Reserve men. This would give, in about twenty-five years, 2,000 Reserve men from each training-ship. As the apprentice system no longer exists, the advantage of such a training for lads destined for the sea is obvious.

I was present on several occasions when the committee of the Liverpool Shipwreck and Humane Society gave prizes to masters of steamers for rescuing the crews of sinking vessels. Several masters stated that they experienced great difficulty in sending boats to the rescue, *because their men could not row*, and the boats had to be manned chiefly by officers.

Sullivan's urging the establishment of school-ships was what led, I believe, to the starting of the industrial school-ships. But whilst the training provided is very good for the poor boys themselves, it is a great waste regarded from the maritime point of view, as *so few* of these boys eventually take to a sea life. The only ships, I believe, which train a good class of boy are the "Indefatigable," of Liverpool, and the "Arethusa" and "Warspite." I give below the latest available returns from some of the training-ships, showing the numbers annually going to sea out of those discharged from the ships. If all these ships were of the "Indefatigable" class, their value to the country would be much greater. As the reports themselves show, the industrial boys, unfortunately, are of two low a class physically and morally to make sailors of, the owners and masters of merchant-ships not caring to ship such boys, whereas the "Indefatigable" boys are prized by them.

		Discharged		Sent to Sea		Total Dis-	Total sent
		1896.		1896.		charged.	to Sea.
"Indefatigable"	..	77	..	68	..	2,247	.. 1,914
"Warspite"	..	221	..	200	..	62,835	.. nearly all
"Arethusa"	..	137	..	133	..	6,271	.. 5,886
"Formidable"	..	101	..	70	..	2,689	.. 1,625
Industrial Schools.	A	..	..	30	..	1,895	.. —
	B	..	..	66	..	3,273	.. —
	C	..	..	14	..	—	.. —
	D	..	..	15	..	—	.. —
	E	..	..	64	..	1,332	.. 359
	F	..	..	35	..	1,159	.. —
	G (1893)	..	..	37	..	—	.. —
	H	..	..	47	..	—	.. —

Taking first the voluntary ships, the "Indefatigable" is the right sort of ship as a training-ship, for the boys are trained for two-and-a-half to three years. The "Arethusa" and "Warspite" train only for one year.

Of the industrial ships, the "Formidable" heads the list in the proportion of sea-going boys. The others I have not denoted by name.

I annex extracts from the Inspecting Medical Officers' reports, which need no comment:—

*Extract of Report from F.*—"The class of boys is inferior to those formerly received. Some very black sheep among them."

"The standard for entry into the Navy is almost unattainable by the boys sent to this ship."

*Extract of Report from G.*—"Considering the good food, etc., it appears strange that our boys do not reach the standard of height, etc., required for the Navy. A few have been successful for the R.N.R."

"The physique of a large proportion of the boys was not that required for a sea life. Some selection as to physical fitness should be made a condition of entrance."

The deterioration of our mercantile sailors outside the crews of the regular liners, who get the pick of the men, is, unfortunately, admitted on all sides. But you will have observed that one of the chief results hoped for from my father's scheme was the improvement of the sailor. I have spoken to many shipowners and masters, all of whom have said that some such scheme would give them a better class of man, and that the pension in abeyance would be an immense check to desertion and bad conduct.

Our mercantile navy is in a most critical condition, and if something be not soon done to remedy it, we shall be in danger of losing our supremacy as a nation of carriers.

The state of affairs is very well shown in the recent report of Mr. Joseph Hoult, of Liverpool, who served on the Manning Committee.

He shows that when he sold his steamer to a German, because he could not make her pay, the German came to our ports and loaded 275 more tons of cargo than he was able to take under Board of Trade rules.

It is a matter for serious consideration whether over-legislation has not crippled our shipping. My father, after nine years' experience as Wreck Commissioner of the Board of Trade, strongly advocated the responsibility being placed on the individual shipowner. His theory was, "If a shipowner is found wilfully to send a ship to sea in an unseaworthy condition, put him in prison, and you will do more to stop unseaworthiness than by all the legislative rules you can frame."

Mr. Hoult also shows that 40 per cent. of our sailors are foreigners. I know from experience a good deal of this is owing to the inferior class of men offering here. Improve the status of the Britisher, and you will largely do away with the objection to him.

There is now an opportunity for Government to make terms with the shipowner. The future safety of our nation may depend upon some such arrangement.

Put him, at least, on equal terms with the foreigner who loads in our ports; give him free lights, as Sullivan urged he was in justice entitled to; and in return make him number a certain proportion of British sailors among his crew, re-introduce the apprentice system, or one analogous

to it, and organise a powerful Reserve. We shall then begin to see an improvement, not only in the trade, but in the character of our seamen and in the reserve strength of our naval *personnel*.

When once the country understands the value to her in peace and in war of the British sailor, any measure the Government may propose for his betterment will be strongly supported.

It is for the members of your Institution, more than for any other body of men, to tell the public in plain terms what is wanted to make this country secure from all attacks and to ensure her retaining the command of the sea; and I am convinced that the mercantile community, whose interests are so much at stake, will, on their part, demand from Government the safeguards deemed necessary by you.

I ask you, therefore, to state your opinion as to the need of a greatly extended Reserve system.

Admiral F. A. CLOSE :—First let me thank the lecturer for the interest he takes in manning the Navy, but I must remind him that his distinguished father, Admiral Sir J. Sullivan, served during the Russian war, when our ships were full-rigged and armed with muzzle-loading guns—they were, in fact, in the same position as in the old war, when the press-gang took men from the plough-tail, and in a few weeks made good gunners of them. As to the Naval Reserve recruited now from the merchant service, the lecturer takes credit for 170,000 British merchant seamen—

Mr. SULIVAN :—That was an old quotation.

Admiral F. A. CLOSE :—No doubt he takes his figures from the Board of Trade, which are not reliable, as foreign seamen with unpronounceable names adopt English names when they embark, and our Board of Trade record them as English. The true number of seamen in our merchant service (as given by experts in Liverpool) are 250,000, only 60,000 out of that total being British. On the outbreak of war these foreigners would naturally leave us, not caring to run the risk of being made prisoners of war; thus we should be left with 60,000 British merchant seamen to man thousands of merchant-ships which are bringing us our daily bread and raw material for our factories; would it not be madness to take any of these men for the Naval Reserve? For twenty years we have been tinkering at this Naval Reserve without much improvement; the last regulation will be a final test, viz., six months' compulsory service on board H.M. ships; heretofore the majority have refused to embark for any length of time, some have refused to embark at all for gun drill.<sup>1</sup> Lord C. Beresford—no mean authority on naval matters—speaking before the United Chamber of Commerce at Southampton last September, on Naval Reserves, stated, that “under the present system the Naval Reserve was not a reliable force, it was untrained, and undisciplined, it was a ludicrous and expensive force”; and I say, not one word too strong, when we consider, that we are depending on these men to fight naval battles, on which the *existence of the nation depends*; on the outbreak of war every ship and every gun should be manned by the Regular forces of the R.N., and not by a Reserve, because it is cheaper. If France has 150,000 reliable naval gunners, why should not we have the same? To take seamen from the merchant service and fishermen from the fishing industry in time of war when food will be dangerously scarce, and call them a Naval Reserve, is a delusion and a snare. A Naval Reserve, or Coast-Guard Reserve, of 10,000 men established on the lines of the *Bristol* Naval Volunteers, which were acknowledged by the Admiralty as efficient, would be of great service to man the coast-guard, and set free the 10,000 naval pensioners who are now detailed for

<sup>1</sup> In 1895, R.N. Reserve were *invited* to volunteer for a six months' course of training on board H.M. ships; I believe one man accepted the invitation!

that service in war-time. Sir Charles Dilke, using my words in the House of Commons, declared that "the Coast-Guard were the eyes and ears of the Admiralty," and in war-time must be extended and strengthened. To man H.M. ships with a reliable force we want 20,000 more Marines, otherwise we shall have to embark soldiers, as in the old war, with poorer results; our present position is one of decided insecurity.

Commander W. F. CABORNE, C.B., R.N.R. :—To those among us who have worked for many years with the object of increasing the efficiency and advancing the well-being of the Royal Naval Reserve, it is very gratifying to see the attention that the force is now receiving; and our thanks are due to the lecturer for bringing the subject forward this afternoon. However, there are one or two points upon which I should like to touch briefly. In the first place, without in any way detracting from the value of Admiral Sir B. J. Sullivan's other recommendations, I may, perhaps, be permitted to express the opinion that had the proposal "that the men should be trained on board a man-of-war, alongside our regular naval seamen," been adopted, there would be no Naval Reserve in existence at the present moment. The merchant seamen of that day were very distrustful of the Admiralty; their antipathy to service in the fleet was also great, and, as it was, many and great difficulties had to be overcome before the men, who suspected the existence of some trap, could be induced to enrol themselves. For some two years past, in addition to employing Reserve men during the manœuvres, voluntary service in the Navy for a period of six months, with the option of volunteering for another like period, has been permitted, and some 200 men are now serving. By a recent regulation all men joining the Naval Reserve are to serve on board a man-of-war for six months during their first term of enrolment—that is, during their first five years. Although such a regulation would have been fatal in the first instance, times have changed, and I think it will now meet with a fair measure of success. All men enrolled since April 1st are subject to the new conditions, and about 100 have joined during the past six weeks. I think the lecturer is in error in stating that a number of men served for a week afloat during last year's manœuvres. This was no new departure; but should he not have said four weeks? With regard to the men coming forward in time of war, they are Englishmen—under that generic title are included Scotchmen, Irishmen, and Welshmen—and I am confident that they will do so; nay, I am willing to stake my existence upon the fact; but, allowing for the sake of argument that they would not be personally willing to serve, it must not be forgotten that they can be compelled to do so, that the system of registration is now so perfect, their whereabouts so well known, that escape from their liability would be impossible. Moreover, public opinion against them would be so strong, combined with the knowledge that future employment in this country would be denied them, that they would really have no option but to fulfil the obligations they have solemnly and voluntarily undertaken. With regard to the statement that out of a Reserve of 25,000 men it cannot be expected that half will be available the first three months they are wanted, it may surprise the lecturer and others to learn that out of a total number of 24,655 men borne on 30th April—only a fortnight ago—8,475 first-class, 9,833 second-class, 221 third-class, and 1,308 stokers, making in all 19,837, were estimated to be employed in the home trade, or in fishing or working at home, and so would be practically available at once. In addition, it was estimated that a further 1,299 first-class, 305 second-class, and 14 third-class men, with 735 stokers, would be available in a month. The balance of 2,465 men would be obtainable in from two to twelve months, although many of them would be retained for service on foreign stations. I can quite believe that only 80 Reserve men called at the Cape of Good Hope during a period of three months, for in January, 1897, only 411 of them were engaged in the West Coast of Africa and Cape trades. Respecting the lecturer's suggestion that the stokers should be drilled, this branch of training was introduced some two years ago. They are required to drill for twenty-one days during

their first year of enrolment, and for fourteen days during each subsequent year ; moreover, I understand that they have been very well reported upon. We are always having comparisons drawn between the French Naval Reserve and our own, invariably to the detriment of the latter ; however, after subjecting the former to a necessary weeding process, it is doubtful whether it would make such a fine show numerically as is generally supposed. What we really want is, to have more British seamen employed on board British ships, to form a recruiting ground for our Reserve, and to conduct our food supply and ordinary trade in time of war ; and this must be brought about, even though it be necessary to have a compulsory manning scale regulating the number of British subjects to be carried. In conclusion, the Reserve during the past seven or eight years has increased some 33 per cent., and whatever may have been the case in years gone by, the authorities are now sparing no efforts to improve its efficiency.

Captain Lord CHARLES BERESFORD, R.N., C.B., A.D.C. :—I should like to say a few words on this most interesting paper. While all the cases want thoroughly looking into with regard to the efficiency afloat, I think there is nothing more important than that of the *personnel*. We may have the largest number of ships armed with the best guns possible, but unless we have the human element, and that human element well trained, we cannot expect to win an action. I think the lecturer has brought before us here a glorious instance of the way authority manages business. I have often said that if any public firm were to run their business as the War Office and the Admiralty do, they would be bankrupt in a year. I generally bring forward some proofs of what I say, and I will show you what is the case this minute. The whole question of Reserve depends upon what the active rating service is in numbers. We want so many men afloat and so many Reserves. We cannot have all active service numbers because we have a very large number of ships in the Reserve, and I think anybody would be unwise to ask this country to keep our Navy always on a war footing. The country would not submit to such a proposal. The first thing to lay down is, what are the numbers necessary for the active service ratings. Authority and some of its critics have always concurred in that number, which is about 105,000 active service, long-service ratings for the fleet. But to show what curious statements authority makes, we had it quite lately said in the House of Commons that we have now got 100,000 men. We have got nothing of the sort. I have said it on many platforms, and I wish the Press would take it up, we have only 85,818 officers and men at this moment. Authority agrees with me and other critics that we want 105,000 men, and they say we have got 100,000, while we have nothing of the sort. In the year 1892 the then First Lord of the Admiralty put these words in his statement :—"At present, all men and boys under the Naval Discipline Act, or borne in ships' books, are included in Vote A"; and he goes on to say :—"A false impression is thus created of the number of men available for *active service*." Now, ever since then, Vote A has been sub-divided, one portion being those "available for sea service," and the other those for "other services." That is perfectly clear. The present First Lord of the Admiralty has fallen into the old error and added up the total of Vote A. I am speaking of active service ratings now, because the efficient service depends on their numbers ; he has fallen into the old error, and he has not only added on "other services," which are not for active service, as is particularly laid down in the Estimates, but he has also added into his 100,000 a number of men which comes to 6,300, who will not be here at all until April next year. That is a thing which documentary evidence can prove. We have only 85,818 men at this moment. Now let me go to the question of the Reserve. In the year 1892 authority laid down that we should have 27,000 Reserve in 1894 ; it is now 1897, and it is only this year that we have voted that number at all. Now we come to what I call the want of business in these transactions. Since the year 1895, although we have not yet actually got the number of 27,000 which was considered necessary for the year 1894, we have laid down 16



battle-ships, 32 cruisers, 52 destroyers, and 8 other vessels; in all, 106 vessels. I say there ought to be some proportion always between the number of vessels laid down and the number of officers and crews who are required to man them. In these days it is more important than ever, because, as the lecturer very properly pointed out, the fleet that can go first into action efficient, that is, with ships ready, fires ready, and men trained, is the fleet that will probably win the action; and you cannot have your fleet efficient unless your men know how to carry out orders, are in perfect discipline, and know how to handle their guns. On the question of this Reserve, as far as businesslike transactions go, it has now been laid down by authority what the number should be for active service ratings, but nothing has been decided with regard to the Reserve. Everybody in this room is capable of doing what I can do, which is, to buy a Navy List and take the ships in the Navy List. You know what their complements ought to be; add them up and multiply the number of ships by the crews necessary for them. It is a very simple proceeding. I say this country is in no way in a position of readiness for war and possible contingencies unless she has 105,000 men in the active service ratings, and 70,000 men in the Reserve. There is a definite programme, and a businesslike statement, and I think that authority should make some statement of that sort to the House of Commons. I have no doubt it will, if men like the lecturer come here and rouse public opinion. I never want to find fault with authority; I know the difficulties; it is very difficult indeed for any Government, no matter how keen they are, to put things right; and we know that this Government and the last Government were equally keen to get things right for the Navy. It is very difficult for them to make a proposal of any sort to Parliament or the country involving a very large expenditure of money without the people are shown the necessity of it, and will back them up as far as the electorate goes. Therefore papers such as this, on a very grave and urgent matter, are, in my humble opinion, of the greatest use to the country and to the Service. I notice in the paper the lecturer has put down the number of active service ratings this year as 110,432; but if he will only get the Naval Estimates and add them up, he will find there are only 85,818 at this moment available for active service, which is the point upon which the whole thing hinges. The statement of the First Lord in 1892 was made as to men for active service, and the other day the First Lord used the same phrase—"active service." The lecturer also says that the experts differ as to whether we have men enough or not. I think he has fallen into a great error there. Experts of all kinds, from the ordinary seaman up to the admiral, will tell you that we are dangerously short of men, and officers too. Then the paper says we could not get them in time of war—and I think a preceding speaker said that we could get them. I agree with the admiral who says that we should not be able to get them. It is a very simple calculation. Nearly half our mercantile marine seamen now are foreigners. When we go to war the ships will be run by British seamen, or not run at all. Those foreign seamen will have to go home. They are mostly conscripts—a great many of them at any rate—and we shall not get the 29,000 R.N.R. men for the Navy. It is absolutely impossible; we are trusting to a rotten reed. We should have a great number more than we have got. I put it at 70,000 men, but we shall not get those men, because the business of the military shipping is to keep the mercantile marine going in time of war—not to take all their crews and stop them running. We want to help them, and therefore we cannot take their crews. I do not quite agree with the gallant admiral as to the quality of the Naval Reserve. I think he attributed the word "deck swabbers" to me, but I have never used the word. I have said that Naval Reserve men are very fine specimens. I am perfectly prepared to go into action with those men to-morrow, if they are properly trained and properly drilled and disciplined—not as they are now. We have these valuable men, these Britishers, and we do not train them and make them efficient; we do not give the men a chance to help us,

willing and able as they would be if properly trained. Then there is the question of ship's training. Here again the Admiralty are doing a great deal. I am very glad to second the gallant officer there—they have taken up this question of Reserve, they have gone into it with entirely new methods of training, they have gone into an entirely new method of joining. We may or may not agree with what the Admiralty proposes, but I submit that those of us who criticise should be very careful to stand aside and give authority a chance. Very likely authority has the best method; anyhow they know more about it than we do. They have taken the question up, and they are doing it very well as far as it goes. It only wants a few more papers like this and a few more people to speak on the subject, and they will do a great deal better, judging by what has happened in the past. [A Voice:—How about the Marine Reserve?] That is not in the paper. There is one more point in the paper which I may say I entirely agree with, namely, that the first principle should be that the Naval Reserve men should be trained alongside the British man-of-war's-men and be in the ship he is going to man when he goes to war. The old feeling between the Navy and the mercantile marine is dying away altogether. We are very glad to have the mercantile marine with us, and I am certain the feeling is reciprocal. I think that is a most important point. As to the duration of time, I think we had better leave it to authority. If their plan succeeds, then it is all right, and if it does not succeed we will try and make it a little better. On the question of the mercantile marine itself the paper says it is in a most critical condition. With that I entirely agree. I think the whole system of manning and registration is altogether wrong. I am only a man-of-war's-man, but I have spoken to many of those who know much better than I do about the mercantile marine themselves, and I find they agree with me, and the more that view is circulated through the country and through the Press the more certain it will be that this question will be looked into. In my humble opinion the whole thing wants reform, and I think the Government should, as far as possible, devise some scheme by which they could help ship-owners and the mercantile marine generally, and make it worth their while to carry British seamen and trained Reserve men in the mercantile marine ready to assist the military shipping when we go to war.

Lieut.-Colonel T. H. BAYLIS, Q.C. (late 18th Middlesex V.R.C.):—I think we must all agree in saying that the title of this paper, "The Formation of an Adequate Reserve of Trained Seamen," ought to have attracted more members than are present at this discussion. It is a most important paper, dealing with a subject which affects the vital interests of England. I would rather have added the word "British" to "Adequate Reserve of Trained Seamen." The difficulty of the present day is that there are very many sailors on board our merchant-ships who are not British seamen and who cannot be utilised in case of war. Having been now for many years connected with Liverpool, I wish to express the opinion of Liverpool shipowners, as I have heard it from them. I think it will be found that it is "over legislation" upon British ships, which does not apply to foreign ships; it lays such onerous obligations and expenses upon British ships that renders their voyages unprofitable in too many instances. The lecturer has alluded to Mr. Joseph Hoult, of Liverpool, who served on the Manning Committee. Now, I will tell you what Mr. George Holt, a member of the large shipping firm (Lamport and Holt) said:—"It is quite impossible in these days of competition with the onerous rules laid upon British shipowners by the Merchant Shipping Act, 1894, and the expenses they are put to in one way and another, to man their ships with British seamen, from which foreign ships coming into our ports are free." The Legislature, it is to be hoped, will move in the right direction, and not impose undue restrictions upon British ships, or endeavour to apply them also to foreign ships. It is a great pleasure to me to have been here; I was attracted by Admiral Colomb's being in the chair, as he is a very old friend of mine. We always pay great respect to what he says, and derive useful information. I think you will find there is over legislation for British merchant-ships which does not apply at all to foreign ships. I am aware

it is a difficult thing to impose liabilities and requisitions upon foreign ships, but it has already been done to some extent by Section 445 of the Merchant Shipping Act, 1894, which contains a provision as to foreign ships with respect to load lines and improper loading.<sup>1</sup>

Captain R. B. NICHOLETTS, R.N. (Retired):—I wish to make a few remarks with regard to industrial-ships. I commanded the "Formidable" for sixteen and a half years, so that I know a little about it. I have been interested in this very important paper this afternoon. It has brought forward a question with regard to our Reserve of seamen, particularly as it concerns the mercantile marine. The mercantile marine of this country, so far as its material is concerned, is the most magnificent in the world, but the *personnel* is in a very deplorable condition; it is choked with the rubbish of neglect at both ends, and until we can open the door to a more respect-

<sup>1</sup> The following three sections from the "MERCHANT SHIPPING ACT, 1894," are of interest, as bearing on this question of legislation, as it affects our own and foreign ships:—

[S. 424.]

Application of  
collision regula-  
tions to foreign  
ships.

Whenever it is made to appear to Her Majesty in Council that the Government of any foreign country is willing that the collision regulations, or the provisions of this Part (V.) of this Act relating thereto or otherwise relating to collisions, or any of those regulations or provisions should apply to the ships of that country, when beyond the limits of British jurisdiction, Her Majesty may, by Order in Council, direct that those regulations and provisions shall, subject to any limitation of time, conditions, and qualifications contained in the Order, apply to the ships of the said foreign country, whether within British jurisdiction or not, and that such ships shall for the purpose of such regulations and provisions be treated as if they were British ships.

[S. 445.]

Provision as to  
foreign ships with  
respect to load  
lines.

(1)—When the Board of Trade certify that the laws and regulations for the time being in force in any foreign country and relating to overloading and improper loading, are equally effective with the provisions of this Act relating thereto, Her Majesty in Council may direct that on proof of a ship of that country having complied with those laws and regulations, she shall not, when in a port of the United Kingdom, be liable to detention for non-compliance with the said provisions of this Act, nor shall there arise any liability to any fine or penalty which would otherwise arise for non-compliance with those provisions.

(2)—Provided that this section shall not apply in the case of ships of any foreign country in which it appears to Her Majesty that corresponding provisions are not extended to British ships.

[S. 462.]

Application to  
foreign ships of  
provisions as to  
detention.

Where a foreign ship has taken on board all or any part of her cargo at a port in the United Kingdom, and is, whilst at that port, unsafe by reason of *overloading* or *improper loading*, the provisions of this Part (V.) of this Act with respect to the detention of ships shall apply to that foreign ship, as if she were a British ship, with the following modifications:—

- (i.) As to service of copy of the Order.
- (ii.) As to survey and appeal.
- (iii.) As to appointment of assessor by consular officer.

T. H. B.

able and better class, by offering inducements by way of pensions and continuous service, I am afraid we shall not get that grand British seaman we had formerly. There is an interesting fact with regard to the pensions of the mercantile marine. There was, at one time, a Greenwich Hospital pension for aged merchant seamen, and to which they contributed, I believe, from sixpence to a shilling a month out of their pay; but this pension was abolished in 1834. It is true it was small—£3 8s. a year, or about one shilling and threepence a week—but it was something, and it was received with thankfulness by those who were fortunate enough to get it, and who had worked well for their country. I was told by a former chaplain to the Missions to Seamen, who was instrumental in getting this pension for many of these men, that it was extraordinary how grateful they were for even this pittance. Now, as I said before, this pension ceased in 1834, and no merchant seaman can now claim it unless he can prove he went to sea in 1829. I did hear about a month ago of an aged seaman coming forward and claiming this pension, but I should think that is about the last of them. With regard to the industrial training-ships, they were originally established for homeless and destitute boys, with the idea of training them for the mercantile marine, not for the Navy—the Navy has its own training-ships, and can get as many boys as they require; they do not want the lads from the industrial training-ships, who are wanted for the mercantile marine. And to show that they are suitable for that Service, I should like to point out that the boys in the industrial training-ships are not to be coupled with those in reformatory training-ships. They are very different; they have never been convicted of crime, their offences generally are of a venial character, the majority being truancy cases. It is obvious, therefore, that a system which enrolled boys of that description—boys full of spirit—was a very valuable system for training lads for the merchant navy. These ships are mainly dependent on the Government grant for their support, supplemented by a small proportion of private subscriptions; and to keep themselves going, they must earn as large a Government grant as they possibly can. The consequence is that no discrimination whatever is exercised in the entry of boys on board these vessels. And what is the result? They do not send half their lads to sea. The latest report of the Government Inspector of Reformatory and Industrial Schools gives the number of boys discharged in 1895 and the numbers sent to sea, and the proportion was, that out of about 800 discharged during the year from eight industrial training-ships, only 45 per cent. went to sea; 55 per cent. went back to friends and to employment on shore. The consequence is that these ships which cost the nation between £50,000 and £60,000 a year do not fulfil the object for which they were originally started, viz., training their boys for seamen and sending them to sea. As far as their being training-ships it is a misnomer to call them so, and steps should be taken to re-organise them and place them on a proper footing, and which should forbid the early entry of any boy unless he comes up to a certain physical standard, such as obtains in the Royal Navy, in order that they shall be filled up only with boys of good physique who are willing to go to sea, and not, as they are at present, filled up with unwilling, unfit, and incapable boys. Until this is done they will not fulfil the object for which they were established. In the *Times* and other places I have advocated a system of the affiliation of these ships, with the land industrial-schools, which institutions dispose of about 12,000 boys amongst them. There is no doubt that out of this large muster there are hundreds of fine well-grown lads who would be willing and eager to go to sea if they only had the opportunity, and who should—provided they come up to the proper physical standard and were of good character—be drafted into the ships, on the condition that they embraced the life of a sailor, and enrolled themselves at the proper time in the Royal Naval Reserve. On the other hand, those boys in the ships who were either unwilling or unfit to go to sea, should be transferred to the land industrial-schools, in order that they may learn a trade which will be useful to them on their discharge.

Commander G. O. MOORE, R.N. (Retired):—I am intruding myself upon you as the actual captain of a training-ship, having commanded the "Arethusa" for nearly nine years. There was one particular point which I noticed in the lecture which I should like to emphasise with a personal experience of my own. The lecturer says:—"The scheme would probably not prevent one single boy from going to sea." The year I joined the "Arethusa" she put four boys into the Navy, and I persuaded the secretary and the committee to make it compulsory that every boy should bring his Navy papers ready signed. Our enquiry officer and various other people said, "You will not get any boys at all." We thought we would try it and we have tried it ever since, and we get more boys now than ever. Every boy comes with his Navy papers ready signed. We get respectable boys who are anxious to go into the Navy. They agree that if possible they will join the Navy, but failing that they will go into the merchant service. The standard for the Navy last year was raised half-an-inch in height and in chest, and so there were a great many boys well grown and healthy who did not come up to that standard. I met a policeman the other day who told me that he was an old "Arethusa" boy and had been at sea for six or seven years and then he had joined the Metropolitan Police Force. I said, "Why didn't you go into the Navy?" He said, "I was not big enough." I said, "You are 5 feet 11 if you are an inch." He said, "Yes, but I was not big enough when I was in the "Arethusa" to go into the Navy." The time of training is an open question, whether it is better for the boy to join at twelve or fourteen years of age.

Commander W. DAWSON, R.N. (Retired):—It is said that we want 70,000 seamen for the Naval Reserves. Where are they to come from? Surely from the merchant navy. Lord Charles Beresford, in the concluding part of his speech, gave us the key to the situation. He pointed out that what was wanted for the formation of a Naval Reserve from the mercantile marine was some pecuniary encouragement to British shipowners to carry British seamen, and for Britons to serve under the red ensign. That would solve the difficulty. That principle would confer a great boon upon merchant seamen, and add greatly to the safety of the country. At no time within history have there been so many splendid British seamen to be found sailing the seas as at the present moment, both in the Royal Navy and in the mercantile marine. The difficulty of getting respectable British seamen to continue to serve in the British merchant navy is, that there is no such thing as a mercantile marine *service* in existence. There are several thousands of British merchant services in existence—not one, but several thousands—and each one of those has its own way of managing or mismanaging its crews. If it were the case, as has been suggested, that the men in the mercantile marine were nothing but deck swabbers, it would show how grossly the merchant services are mismanaged. The fault would not lie in the victims—the merchant seamen—but with those who managed the seamen; that is, with the system of manufacture which make them what they are. If merchant seamen are so bad as has been said, then the manufacturers of merchant seamen must be a very stupid lot indeed. As a matter of fact, there are in the mercantile marine a most highly respectable body of men. But it is undoubtedly the case that a large number of the more respectable men are driven out of certain ships of the mercantile marine. Why? Because some of the services in the mercantile marine are so conducted that it is impossible for self-respecting Englishmen to serve in them, and therefore they find employment elsewhere. Improve the management of crews in the mercantile marine, and respectable men need not be so driven out. The vacancies thus created are often filled by ne'er-do-weel Englishmen, by European foreigners, by Asiatics, Africans, and South Sea Islanders. Out of 173,000 seamen in British foreign-going merchant-ships, nearly 63,000 are foreigners and Lascars serving in ships in which self-respecting Englishmen cannot serve. The conditions of service, as to frequency of payment, continuity of employment, and general treatment on board,



differ very much, according to the so-called "trade" ships are engaged in. The merchant services, which employ 173,000 men in the foreign-going trade, generally withhold the wages and discharge their crews abroad, and most of the ills we generally speak of arise there, and two-thirds of the men are British subjects. On the other hand, 40,000 men belong to the home trade, in which the crews are frequently paid, and almost continuously employed, so only one-fortieth of these men are foreigners and Lascars, and these crews are seldom complained of. The crews of inter-colonial ships commonly belong to other races than British; whilst the vessels belonging to the Colonies are often manned by mixed crews. The steamers' crews are quite different from those of sailing-ships. And the term "seamen" includes every paid man and woman serving afloat. There are a large body of Chinamen, Malays, and Lascars, etc., forming whole crews of trading liners sailing to the East from London, and the same thing occurs in Liverpool. These Chinese, Malay, and Lascar crews are found in large liners belonging to very large companies, who man their ships almost exclusively with Chinese and other Asiatics, though hoisting the British flag, the only Britishers on board being the officers, engineers, and quarter-masters. In the last few years Chinamen under the British flag have increased immensely. The law will not allow employers to discharge their Asiatic crews in our home ports, so that they are in practically continuous employment, and are so much better off than English crews in the same trade. A shipowner said to me a short time ago that "these Asiatic crews gave very little trouble. All you had to do was to consider their wants and their prejudices and their feelings, and to supply them with reasonable things, and they gave no trouble at all." I replied, "Don't you think, Mr. So-and-So, that if you applied the same principles to the treatment of British seamen, you would find us also not very troublesome people?" The treatment of the seamen in some merchant-ships is abominable. I have not time to go into individual cases, but I speak from direct information. For the last six or eight months I have had the pleasure and privilege of spending my evenings at the Mission to Seamen Institute for the Port of London in a sort of club of merchantmen, mingling with them freely; and one heard a good deal in a quiet way of what sort of life it is, from their point of view, and how things are managed on board some ships, and how they are mismanaged on board others. A man belongs to the mercantile marine simply whilst on a voyage, but when he comes back he is kicked out. What happens to him when so discharged, depends upon whether he can find anything to do on shore. They do not receive any wages whilst on a voyage, until they come home, and monthly allotment notes are rarely given to any but officers, though the crew may be abroad for two years. It is economical management to induce men to desert in ports abroad when several months' wages are due to them. As many as 14,000 men deserted from the mercantile marine in ports abroad in the year 1895. Most of the deserters have wages due to them. The odd thing is that men who have no wages due to them seldom run away. What becomes of the wages thus forfeited? That is a question for the Chancellor of the Exchequer to see to, for he is supposed to be heir to the forfeited wages and effects of deserters; yet he does not get a penny by his heirloom. It is wanted to organise a Reserve of 70,000 British merchant seamen, and here we are driving 14,000 men out of the British merchant service every year by desertions in foreign ports; somebody pocketing their wages and effects. It is estimated that the amount of wages due to each deserter is about £10 at the very least; which, for 14,000 deserters, is about £140,000. This £140,000 is supposed by law to go into the hands of the Chancellor of the Exchequer, but he does not get one penny of it. We have high authority for saying that "money is a root of all evil," and this accumulated wages is a root of much evil. Desertion means far more than loss of money: it means loss of character, and very often loss of physical health; it often means ruin to the men and to their families. This desertion of 14,000 seamen in one year is one of the questions to



be faced in considering any permanent Reserve based on the mercantile marine. Now let me take another difficulty. These Asiatics who man British ships cannot be legally discharged from the vessels in British ports. They are actually kept on by law in board and wages, and so have got continuous service. Thus these Asiatics have advantages that British seamen have not. They are treated far better in every respect. They are not allowed to be discharged in our ports. All the time the ship is discharging its cargo and taking in another cargo they are on full pay, and being provided for by their employers. If the same thing was done for a British seaman, might not a respectable British seaman do as well as heathen Asiatics? But there is another point to be dealt with. The word "ship-owner" is only a *façon de parler*. There are none. There are shipping companies, and many of them are limited liability companies. The managers are themselves merely the servants of the shareholders, and cannot do exactly what they want to do. Percentage upon the shares naturally governs the management, and managers have to sail very close to the wind, if they would weather competitors and sharp competition. To form a Naval Reserve of 70,000 British merchant seamen, all these things will want looking into. I quite agree with the concluding suggestions of Lord Charles Beresford's address—that the whole question of the conditions of service at sea must be grasped with the view of making the mercantile marine a more national body than it is—more entirely British—and on making it play its part in supplying fighting men in time of war. Something might be done at comparatively small expense, which expenditure must come from outside the merchant service. It is not reasonable to expect shareholders of shipping companies to put their hands into their own pockets and to expend their private funds for the purpose of preparing to defend the nation in some future maritime war; that ought to come out of the public. Something might be done in the way that Lord Charles Beresford has sketched out.

Mr. FRANK RAIKES, M.P., Q.C. :—I am not a member of this Institution, I am sorry to say, but in early life I had some practical experience in the mercantile marine service and in the Navy; more lately I was a member of the Manning Committee, and consequently I heard a good deal of the evidence, and a good deal as to the conduct of British merchant-ships at the present time. It is the most distressing thing in the history of England that English sailors who have made England what she is should be disappearing from the face of the earth, that you find your English merchant-ships manned through and through with foreigners. I have had a case not so very long ago of an English four-masted ship commanded by a Russian Finn, the officers were all foreigners, and there were only two Englishmen out of a crew of thirty-four. The only thing about that ship that was English was the flag she flew. Where do shipowners expect in time of war that a ship under such conditions as that would go to? Would she go into an English port? She would find her way into a foreign port, and naturally the officers and the crew would be made great heroes of because they had brought in a fine English ship; and I think that consideration ought to weigh with the British shipowner, even though it tends somewhat to his own detriment. I think there is a natural cure for the evil which has been suggested by many of the speakers here to-day, and that is, that you must treat these matters as commercial transactions; and that if you will do something which will enable the English seaman with his higher standard of life, altogether the better man, to serve on board all English merchant-ships, that will serve to a great degree to solve the difficulty. I think that is to be brought about, and is only to be brought about, by catching him young—by training him when he is a lad—when he can learn his drills rapidly. Six months' training under those conditions will be worth a couple of years, I do not hesitate to say, when he is a man, an able seaman, perhaps, of thirty-five, or something of that sort, brought up under a different system altogether; if you bring him up and give him a training when he is quite young he will not forget it, especially if you facilitate and give him greater opportunities than he

has at present of coming back from time to time ; instead of going to sleep on a doorstep, let him go back on board a man-of-war in the port where he goes to, and put in a week or a fortnight or a month's training and get his pay for that ; then you will be doing a great thing. If he does not do his service he does not get his pay, and if he does his service and continues for a certain number of years, during which he may be called upon for active service, at the end of that time you should give him a reasonable pension ; and you will have the cheapest Reserve you can possibly devise for the English Navy. You will have competent supplies of people, for you will have the whole of the merchant service to draw upon, for this reason, that if you give him a pension, and something besides, he will compete with the foreigner on good and easy terms. I do not know how far, when foreigners come into our mercantile marine service, that militates against any pension they may be earning, because they are maritime conscripts of their own countries. I am inclined to think that the foreign countries are exceedingly glad to let their seamen have some sort of training on board English ships ; and as long as a man comes up when he is wanted, I do not think it militates against his pension. I do not think there is much fear of Englishmen going and shipping on board foreign vessels. If you give him a pension he will compete on fair and equal terms with foreigners, who get a pension of some sort or another, and it will not cost any more. Wages, of course, are what is behind the whole question : the shipowner thinks he can get foreigners cheaper, and that they bring down the general price of wages by the fact of their being here, and if you can enable the English seaman to compete with them on the same terms I do not think wages will go up ; and a man naturally prefers to have his own countrymen on his own ship, and the foreigner will have to go to his own ships to get service, and will not come here. I think by that means you will solve the whole question without difficulty. You only want the initial outlay of having a great many more training-ships than at present, to have them closely in contact with the Navy, and take the lads on the gun-boats, torpedo-boats, and torpedo-catchers, and let them see all the modern appliances of naval warfare, and keep them up to the mark while young. Then I do not think you will have any trouble hereafter, either in a dependable Reserve or a dependable mercantile marine or Navy. I do not suppose there is a finer body of men than the average crew of the British man-of-war. I suppose the average age will be about twenty-five to twenty-six. They have had service before they actually went to sea for a couple of years on the training-ships, and five or six years on ships going to sea, and you can pick and choose them. We have heard what a tremendously high standard you have, and the great chest measurement you require. You have the best boys in England to choose from, and you can get as many of them as you like, only you must give them some chance of prospect for the future ; and if you have plenty of training-ships all round the country, and get the best of the mercantile marine for him to associate with (as he will do when ships are no longer manned by the scum of all nations), British merchant service seamen will be the same class of fellows as are in the English Navy, and you will have all that you require. They will have been trained on an English man-of-war, and will be called upon when wanted for service, and will drop into their places and know what they have to do, and it will not cost the British shipowner sixpence. We shall have much more reliable men, who can be trusted to do anything and go anywhere, and both the mercantile marine and the Navy will be very much better for such an alteration. I thought, as a member of the Manning Committee, it was just as well I should say a word or two upon this subject.

Mr. SULIVAN, in reply, said :—It is with great diffidence that I, a civilian, living out of reach of technical advice and of information available for reference, have attempted to say anything on so professional a subject before an expert audience. I quite understand Admiral Close's remarks as to the antiquity of my father's expressions, and I know, whilst many are applicable to the present day,

some point more to an earlier date; but I think even these teach some lessons. Admiral Close's observations bear out strongly what I have said regarding the present state of the mercantile marine, which should be a stepping-stone to the Royal Navy. The number of seamen given, 170,000, was the calculation for 1860, but I think this is somewhere near the number of British sailors we have to-day in the mercantile marine. If Admiral Close's figures are the correct ones, then, if the foreign sailors leave us in war-time, we should not have men enough to man our food-carrying steamers, much less have any to spare for the Navy. It would be far better if nearly all our sailors were British, even if some were taken for the Navy to assist in keeping our trade open. Commander Caborne has referred to some very recent improvements made in the training of the Reserve. These I am very glad to hear of, for they are signs that, after the lapse of thirty-seven years, some approach is being made to my father's original scheme of organisation. That the authorities believe in the virtue of a Reserve from the mercantile marine is evident from the fact of their increasing it, though to a small extent. Lord Charles Beresford has given some valuable additions to my arguments, for which I thank him. I was glad to hear the remarks from Colonel Baylis, coming as he does from Liverpool. I believe over-legislation is at the bottom of a good deal of the depression in shipowning. Why do we find so many British owners running their ships under foreign flags, if it is not to escape the onerous burdens imposed by British law? Captain Nicholls bears me out in his remarks. The old Greenwich Hospital Fund was a failure owing to its mismanagement. My father's scheme included the restoration of the fund to a better footing, under Government control and guarantee, so as to give seamen pensions of £10 per annum. I accept Captain Moore's corrections. I regarded the training for two-and-a-half years given in the "Indefatigable" as superior to the year's training in the "Arethusa" and the "Warspite." Captain Dawson refers to the state of the merchant seamen, and I must admit that there is a good deal of ground for his complaint against certain owners. My father drew the attention of the Committee on Merchant Shipping to this question of treatment, and contrasted the bad accommodation too often found in British ships with the superior attention paid to sailors in American vessels, resulting in the relative absence of sickness in these latter. Masters have told me the Americans feed their men better, and so get more work out of them. As to the foreign sailors shipped by the British owner because they are cheaper, it may not be surprising when the trade is a losing one. But allow him to compete on equal terms with the foreign owner, and, when the financial aspect has improved, there may not be the same pressure to cut expenses so finely. I believe owners would gladly accept restraint in this direction in return for freedom in other matters. But I will also allow there is fault to be found with our men, and this makes it so necessary to tempt a better class to come forward. My only experience as an owner was in taking a crew into the heart of Siberia, up the River Yenisei. I had an English crew, but shipped one Norwegian *en route*. Of the crew of twelve, I picked the two Naval Reserve men and the Norwegian as the most reliable to leave in that country in charge of the steamer. Mr. Raikes, by his valuable remarks, endorses the statements I have made.

The CHAIRMAN (Vice-Admiral P. H. Colomb):—I think the lecturer is to be congratulated on the fact that, if he has had a very small audience, he has had one which was bent on business. I doubt if I have ever listened—sitting in this chair—to a discussion which was more to the point than this one. A great deal of valuable matter has been brought forward. The latter part of the discussion, as you will have observed, deals almost wholly with the condition of the mercantile marine, and it might be said at first sight that a paper on the provision of an adequate Reserve of trained seamen did not naturally lead up to that subject, but I think the discussion has shown us that that is the root of the question. Lord Charles Beresford has put it correctly, and as most naval men see it. You may

easily overdo your permanent service of seamen; you cannot keep your naval service in peace-time on a war footing, you must have behind it your Reserve of ships, and for those ships you must have a Reserve of some kind, and that cannot be a Reserve of your regular seamen because of the difficulty of keeping them at sea. That being so, you have to go to the mercantile marine for your Reserve—to the seamen who are kept seamen, and who are kept so until you want them in your war-ships. Therefore we have not been out of order in allowing the discussion to go entirely into the question of the state of the mercantile marine and the men in it, because you want to get the mercantile marine into a proper state as your Reserve when the time comes. Now I think the general correspondence of view amongst the various speakers of so many classes has been striking. The only speaker who seemed at variance was Admiral Close in some of his remarks, in stating that the Royal Naval Reserve men were not to be depended upon, that they were not the right stuff, and if they were, you could not get them when they were wanted. It seems to me that the general impression of all the other speakers—as it certainly is mine—is that if you could get the 70,000 of the Naval Reserve, of whom Lord Charles Beresford speaks, on just the same principles as you have now got 25,000, you would not be so far out.

Admiral CLOSE:—There are not 70,000 altogether.

The CHAIRMAN:—I understood you to disparage the present 25,000, and to say that they were not the right stuff, and that you could not get them if you wanted them.

Admiral CLOSE:—And if you could get them, they would be wanted for the merchant service in time of war, and not for the Navy.

The CHAIRMAN:—That again is another question. I thought Commander Caborne answered those points which were brought forward; he showed the enormous proportion of these men serving at home. My own impression is that being Englishmen, and being good fellows, you would get those men to come forward voluntarily, but the compulsion to make them come forward is absolute. I have heard it said before that if nobody else sent them forward the women would. If you get into the mercantile marine a sufficient number of men similar to those who are now enrolled as Royal Naval Reserve, you would do very well; but the point is, how to get the 70,000? It seems to me that there is a concurrence in what the late Sir Bartholmew Sullivan said as to one of the ways of getting hold of these men. That is, as Mr. Raikes also said, to take them young and to pass them young into the mercantile marine under an engagement to serve in the Royal Navy. Give them the best training you can, then through the Royal Navy, but not as belonging to it, but as belonging to the mercantile marine. I think when you look at the Estimates and see that you are spending at the present time a total of £249,900 only on Reserves, for this tremendous Navy on which you are spending twenty-one and three-quarter millions, the proportion of money you are spending is not large enough. Considering the enormous reserve of ships besides those you have in commission you ought to be spending a great deal more money on *personnel* in them, for as Lord Charles Beresford has rightly said they are no use at all unless the *personnel* is provided—they are mere shadows. That being so, it seems that if you spend rather more money, if you establish the school-ships for the mercantile marine, paid for by the Admiralty; if you pass these boys into the mercantile marine after training just in the same way as you now pass boys from training-ships into the Royal Navy, you would get that number of men which you want at not a very great cost, provided you made it worth the shipowners' while to take them; you would have to do something of that sort. It is quite clear that the shipping trade is not in a condition to enable the shipowners generally to help you in that way without compensation. I own that after listening to the discussion I feel the greatest difficulty of all is the condition of the mercantile marine as represented by Captain Dawson. He is very well acquainted

with the inner life on board merchant-ships—very well acquainted indeed—and I think he spoke very justly in pointing out how many services there are in that which we are accustomed to call the mercantile marine service. He shows what a change for the better would be made could the long-voyage service be placed on the same footing as the short-voyage service. We must look for something like continuity, something more continuous in some way or other, some enrolment or some way which will make the mercantile marine more a general service than it is at present, and enable really good men to join it with good prospects before them, and to bring, as it were, the pressure of opinion to bear upon owners to make their service continuous; if you do that, I think you will get rid of some of the difficulties which have been spoken of. But I quite agree with what has been said as to the over-legislation. We properly object to the way in which legislation has been fiddling with our mercantile marine, while at the same time we allow all our rules to be broken by foreign ships trading to our own ports. That, to me, is not reasonable. If it is necessary for the safety of mankind that you should interfere as much as you do with merchant-ships, our rules should be binding on all ships that frequent our ports. They should not have privileges unless they abided by the regulations under which those privileges were granted. I think those points have been all brought out very clearly. It has been a capital discussion, and will have its proper weight. I am only sorry that there was not a larger audience. If my friend Mr. Sullivan had been able to get Lord Charles Beresford to take the chair, he would have had a larger audience and a great many reporters, and the matter would have gone forward much more to the public than it will now. I am sure that you will join me heartily in thanking the lecturer for the capital paper he has given, and the excellent discussion he has promoted.

## ON THE INSTRUCTION OF OUR SOLDIERS TO SHOOT UNDER ACTIVE CONDITIONS OF SERVICE.

*By Colonel E. C. BROWNE, Commanding 21st Regimental District.*

Tuesday, May 18th, 1897.

General Sir RICHARD HARRISON, K.C.B., C.M.G., R.E.,  
in the Chair.

The CHAIRMAN :—Colonel Browne, who is about to lecture to us this afternoon, has had considerable experience, and has taken very great interest in the question of what is called musketry in the Army. He has been in charge of a musketry school in India, besides having always devoted considerable attention to the subject while he has been working in other capacities. He commanded the 1st Battalion of the Royal Scots Fusiliers for the authorised period of four years, and he is now commanding one of our regimental districts in Scotland ; so that I think you will agree with me that he is fully qualified to deal practically with the question that he is going to bring before us this afternoon.

### LECTURE.

IT is only fair to myself to mention the fact that the lecture which I am about to deliver was written three months ago, and before I had seen Colonel Paton's Report for the year 1896-97. Otherwise, I may be accused of being wise after the event, as the Hythe Report foreshadows some of the reforms which I advocate in my paper.

In all the various spheres of human action, peaceful or warlike, commercial or domestic, where important issues are at stake, in order that the actors, collectively and individually, may be competent to successfully accomplish their task, it becomes necessary that each and all shall be trained beforehand to work under conditions resembling, as far as practicable, those under which their difficulties will have to be grappled with and overcome.

Any training which falls short of this, can be, at the best, theoretical, elementary, and incomplete.

There must be few amongst you who have not partaken of one of those hasty and indigestible dinners which railway refreshment-room contractors provide for travellers.

The train pulls up at a station, and it is announced that twenty minutes is to be allowed for dinner. A general rush is made for the



saloon, and in a few seconds every chair is occupied at the tables, and the repeat has begun.

There is only a waiter to every ten passengers, the majority of whom are fussy and exacting, and desire his undivided attention. But he and his companions go about their work with a method which shows careful training and the confidence which such begets. To work under conditions of hurry and excitement has become easy to them. With what rapidity do they change the plates as they glide noiselessly about! There are no collisions, nor is the hot soup precipitated down the guests' backs. Course succeeds course in rapid succession, until, having bolted an extraordinary quantity of food, and finished your last glass of claret, you fussily jump up and pull out your watch to find, to your amazement, that the whole affair has been got through in twelve minutes, and that you have still eight minutes to spare.

Let us now change the scene to the palatial dwelling of a wealthy friend, where are a number of men-servants—highly-trained, highly-paid, and highly-powdered individuals.

In spite of the protests of the butler, you prevail upon your friend to try a dinner under refreshment-room conditions.

The result may be imagined. The men, accustomed to work under the slow and tranquil conditions imposed—the dinner lasting an hour and a-half—rush about hurriedly, jostle each other and upset the dishes. There is talking and confusion, and the more nervous ones become practically helpless. In vain the butler tries to infuse order into the operations of his little army, but he fails disastrously; and the time allotted has elapsed before the dinner is a quarter finished.

I have used the above simple parable to illustrate my paper and to indicate the general drift of my proposals.

The refreshment-room waiters, whom we have seen working so successfully under circumstances of hurry and confusion, are intended to represent soldiers trained upon such a system that they have acquired the habit of shooting straight and effectively, individually and in bodies under active service conditions, and who can confidently be relied upon in extreme emergencies such as those of battle.

The footmen, who although well-trained men and good waiters, when working under the orderly *régime* of a great house, but who have broken down when called upon to work under changed conditions, are soldiers—good men and true withal—whose only training to shoot has been the ranges, and, perhaps, a day or two of field firing over level ground free from physical difficulties and variety of feature, and for the most part with great individual deliberation at a black mark painted on iron or canvas—who one day find themselves called upon to shoot straight and steadily midst the hurry and excitement of a general action, and where, be their foes armed with breech-loaders or blunderbusses, with spears or assegais—they must be withstood and shot down while advancing at a run; or, if necessary, sought out and knocked over under changing conditions of ground and movement; in thick woods, o'er hill and dale, amongst rocks and boulders, along the banks of wooded

streams ; now appearing, now disappearing ; anon in dense masses and again in single skirmishers ; but continually firing or throwing their weapons, and continually in movement throughout the ever-varying vicissitudes of an action, small or great.

Had it not been my lot to have had a very long and intimate connection with musketry—an out-of-date term now—in all its forms, as a practical shot, an instructor, as the inspector of a very large district in India and Burma, and as the chief instructor of a school, and as a commanding officer of a battalion, I should not have been here to-day. I am quite aware that the subject is of the driest—but the time for its consideration is not, I hope, inopportune.

A new rifle has of late been issued to Her Majesty's forces, and the question of an effective method of instruction on the principle of untiring progression in the art of shooting has within the last few months been engaging the attention of the Commander-in-Chief and his most able and distinguished coadjutors. Within the past decade great progress has been made in the way of practical reforms, but, to my mind, we have not yet reached the goal to be desired—the twofold goal, if I may use the term—of a more comprehensive and realistic system of training, and the acquisition of improved training-grounds.

In order to fill your minds with hope for the future, I have resolved upon the prosy expedient of asking you to have patience with me while I glance back retrospectively in an endeavour to give you some idea of what has been done in the past.

You mustn't take alarm and rush out of this theatre, to escape one of those awful inflictions to which so many lecturers are given, viz., "An Historical Sketch," if I refer to the year 1866. Well, that was the year during which I found myself, when a very young subaltern, a regimental instructor. Musketry was then the most irksome and the most thoroughly detested of all the duties of a soldier. It meant for me about eight hours daily for three months on the ranges while a thousand men fired ten shots each at an iron target—the officers, very few of whom knew or cared anything about it, being only too glad that I should do the work while they smoked or yawned in a tent. Musketry men were regarded as more or less harmless lunatics, and Hythe was generally known as "The Asylum." The reason was plain. The practical mind of the British officer told him that this dreary process was not the way to prepare their men for actual fighting. Moreover, the generals and commanding officers hated it, because, during the whole of the drill season, brigades and battalions were so attenuated owing to the progress of the annual course that such work became ineffective.

Naturally the crack shots, comparatively few in number, who won prizes year after year, were not adverse to the course, and even these could only shoot when perfect silence was kept by the squad, and the elements were propitious ; but, in the majority of regiments, mediocrity was only aimed at, the men being only ambitious to get out of the third class to escape the consequent extra drills.

I say that the system of teaching our men to shoot at this time was not regarded as thoroughly *practical* by the huge majority of officers.

But few, if any, seemed inclined to say so. The generals and staff, I believe, regarded target shooting and all its concomitants as the uncanny machinations of Hythe and her particular monopoly, and thought it best to leave so technical a subject in the hands of the professed experts.

The campaign in Bohemia, at this time taking place, gave little help, by way of illustration, to those few who desired reforms. There was no question of shooting. A great strategical movement was crowned by tactical successes; for while the poor Austrian soldiers bungled away with their ramrods and caps, the Prussians mowed them down with the breech-loaders.

Every nation, England I think about last, came to the conclusion that the death-knell of the muzzle-loader had been sounded on the field of Sadowa. But little was really done in the British Army until four years later, on the outbreak of the Franco-German war in 1870, when the Snider-Enfield—a converted muzzle-loader—was adopted. This entailed, however, no important change in the *system of instruction*—the same everlasting ding-dong at the iron targets being thought sufficient preparation for the ordeal of battle.

I have never seen any reliable statistics of the “fire results” during the great struggle in 1870-71, but I have read and heard from both French and German officers engaged that the shooting was, as a rule, wild and ineffective, hundreds if not thousands of rounds having been expended without any results. As to what we now call fire discipline, there was none. I think I am right in saying that volley firing by sections, half companies, or companies were never attempted, for the simple reason that sufficient training had not been imparted to the men of sections and their leaders during peace. So both sides blazed away in a wild, unrestrained individual fire.

During the Russo-Turkish war some attempt was made to compute the results of the Turkish fire directed against the vast masses of Russians advancing up the Plevna heights. I think Colonel Fife-Cookson has written on the subject, and he was an eye-witness.

It was estimated that the Turkish infantry fire produced its maximum effect at 700 yards.<sup>1</sup>

Here at least were found more bodies of fallen Russians than at longer and closer ranges, and here the attacking columns received their first serious check.

As the result of the experience gained by the three great wars above alluded to, no important change took place in the system of instruction in musketry in the British Army.

<sup>1</sup> From all accounts, the Turkish fire was “unaimed” fire—the men blazing away at the Russians haphazard as fast as they could load. Consequently, when the enemy were still at a distance the fire was comparatively steady; but as they approached, owing to the absence of all control, the shooting, instead of improving, became worse and worse.

Libraries might have been stocked with the works which appeared on strategy, tactics, and all subjects which may be called "the higher branches of the military art," but little or nothing was written on fire tactics, fire discipline, and rifle fire in general. I may mention here that Major Mayne's excellent work on "Fire Tactics" was published in 1884.

The reason would appear to be that it does not seem to have struck any witness to the fights, or any critic, that rifle fire influenced, in any material way, the issues. Success or failure was invariably accounted for by good or defective arrangements, or by the moral or physical superiority of one side or the other.

But the time was at hand when we were to have an eye-opener. Our unfortunate relationship with the Boers brought about hostilities, and, to the surprise of all the world, our brave young soldiers, *whose only training had been the ranges*, found themselves "not in it" against the quick, accurate, and deadly fire of their opponents.

I have no desire to harp on this unpleasant subject, but it must be admitted that our failure pointed to the necessity for an improved system of instruction and improved shooting ground.

Even *Mr. Punch* thought so. You may remember his cartoon of a burly Boer's inquiry of the Commander-in-Chief: "Does your Royal Highness require a rifle instructor?"

But, at any rate, nothing really drastic in the way of reform took place. We are ever too prone to forget our experiences, especially if the remembrance of them is unpleasant. So, after all the talk about the Boer shooting, the fault of our reverses was laid to the noble soldier who died upon Majuba Hill, and the subject dropped for the time being. At least, it would appear so, for when the '84 book saw the light, those who looked for great reforms were doomed to disappointment. The annual course was still tiresome and uninteresting, and although, as an inspector of musketry of a large district in India, it was my duty to see its provisions put in force, I confess I groaned over what appeared to me to be many of its shortcomings. Even the few new practices which had been introduced, and which were excellent in theory, were at many stations never properly worked, for the reason that commanding officers were supplied with no funds for the necessary apparatus. Consequently, the latter were always breaking down and incomplete, and I am sure my visits were looked upon with horror, as it was my duty to insist upon expenditure where no public funds were forthcoming.

There was a slight re-action in favour of further reforms after the publication of the '84 book. The Commander-in-Chief, I understood, interested himself personally in the subject, which now began to attract the attention of persons of distinction and influence, and great things were expected of a promised new code of instructions.

Our system of drill and tactical exercises were already under the microscope of the military reformer, and musketry followed. So, as the result of the report of a committee, the '87 book was published. This showed the progress of enlightened ideas. Provision was made for additional practices, some of which, if properly carried out, were a great

improvement on the past ; but no funds were provided for better ranges and more perfect apparatus. Too many prizes were still given for individual shooting at a fixed mark, and not nearly enough for sectional practices which involved good drill and fire discipline.

In 1891, the Lee-Metford rifle was substituted for the Martini-Henry, and the following year new Musketry Regulations were issued. The field practices were enriched by the introduction of the "Section Attack" and "Rapid Volley Firing"—both of which necessitated attention to good drill and fire discipline, although, of course, the distances were always known to the men, and all was plain sailing. The most important enactment in this book was, that at least *half* the prize money granted should be given for sectional practices. In 1894, a new edition to the Musketry Regulations was issued, which shows further progressive steps towards practical training, while the last edition—that of 1896—is a further improvement on its predecessors, inasmuch as it contains some useful rules for instruction in fire discipline.

But we must not believe that we are yet provided with the best possible code of regulations.

Observation and common sense have so far prevailed, that it will be admitted on all hands that the last decade has seen considerable improvement in our "system" of instruction—apart altogether from the question of the efficacy of this rifle or that, or this cartridge or that—which are subjects in themselves. Much pedantry has been left behind, and the tendency has been towards practical efficiency.

Why, then, should we not hope for further progress during the next decade?

I am not vain enough to imagine that I am justified in claiming personally any credit for this progress, but it is now nine years since my pamphlet on "A More Complete Assimilation of our System of Instruction in Rifle Exercises and Fire Discipline to Active Service Conditions" was published, and, of which this lecture is the development, and the lines indicated therein have been followed with little deviation.

Before proceeding, however, to propose further changes of a minimum of individual practices, under our ordinary range practice conditions, and a maximum of individual firing at moving targets, or sectional practices at, if possible, unknown distances ; of such practices as would include marching, drill, and fire discipline, and of field firing, I should like to preface my proposals by two axioms, the soundness of which may be possibly disputed by advocates of the process by which the Queen's Prize is won.

1. That skill at shooting at a fixed mark, in any position, is no guarantee of accuracy at things in movement, or when the firer himself is in a hurry or, in fine, of being able to shoot well under active service conditions.
2. Conversely, that being able to shoot quickly and well at objects in movement, or when the firer is in a hurry or excited—in fact, the acquired habit of using mind, hand,

and eye in unison under something like service conditions  
—is a fair guarantee of good shooting at a fixed mark under  
range conditions.

The annual allowances of ammunition for each recruit and each  
trained soldier is 200 rounds.

Let us see how these rounds are expended :—

In individual target practice	-	-	-	-	63 rounds
In sectional practices, <i>i.e.</i> , volleys, rapid and deliberate ; independent firing ; and sectional attack	-	-	-	-	80 „

Thus, according to the tabulated course, he fires - 143 rounds

The remaining rounds are handed over to the C.O. to be disposed  
of in any way he may think fit, subject to the approval of the G.O.C. ; but  
company and battalion field firing must be executed when possible.

The recruit's course is naturally different from that of the trained  
soldier, being more elementary, and is, I think, good as it stands,  
although, perhaps, even more rounds might be expended on individual  
firing at close ranges, so as to ground the recruit thoroughly in the use  
of his rifle. Volleys, and two or three practical sectional practices,  
should be included in the recruit's course.

Once a man becomes a trained soldier I would devote practically all  
his shooting instruction in subsequent years to a variety of practices to  
be carried on as under, as near as possible, active service conditions.

Thus my Table B would be something after this fashion :—

				Yards.	Rounds.
Individual—	1.	Rapid individual	-	300	10
„	2.	„ „	-	500	10
„	3.	Moving targets	-	500 - 300	10
„	4.	Vanishing targets	-	500 - 300	10
Sectional—	5.	Independent	-	300	10
„	6.	Moving targets	-	600 - 300	10
„	7.	Vanishing targets	-	600 - 300	10
„	8.	Volleys, deliberate	-	600	10
„	9.	„ „	-	800	10
„	10.	Rapid volleys	-	500	10
„	11.	„ „	-	400	10
„	12.	Running practice	-	-	10
„	13.	Extended order practice	-	-	10
„	14.	Section attack	-	-	20
„	15.	Long range volleys	-	-	10
„	16.	Company field firing	-	-	20

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It is not my intention to propose that the above practices should be  
carried out obligatorily. By no means so. It is a step in the right  
direction to give latitude to captains and commanding officers as to the  
exact manner of expending rounds ; but, unless the lines on which they



should act are pretty clearly indicated in the Regulations, diversities of opinion may lead to all sorts of departures from the spirit thereof. For example, I have heard more than one officer in high authority say that "bull's-eye" shooting, *i.e.*, individual shooting at a bull's-eye, was the only practice of the least use: that sectional practices were nonsense, and field firing a cruel waste of public money.

In addition to the above, battalion or brigade field firing should be a *sine quâ non* of the year's shooting training.

But you will say, gentlemen, Where is the ammunition to come from, seeing that practically all has now been accounted for? Well, being of a sanguine, perhaps even an optimistic, turn of mind, I am hopeful that in the immediate future a generous Government may allow twenty or thirty rounds in addition to the present allowance for that special purpose; and, if worst comes to worst, some of the Table B practices will have to be struck out. I consider the present allowance of ammunition inadequate to the end in view.

Thirty rounds per man is the minimum allowance for battalion or brigade field firing; if the thing is to be properly done, why fifty would be better.

I claim for my proposals the following advantages over the system of instruction which now obtains :—

1. That the whole of the practices take place under, more or less, active service conditions, as is the case with field and horse artillery.
2. That they involve, necessitate, and, in a measure, are the test of previous training in drill, fire discipline, and tactics.
3. That by substituting interesting realistic practices for the dreary and monotonous individual shooting, musketry may become more popular amongst soldiers of all ranks.
4. That, seeing that practically all the money for prizes, instead of being given to individuals, would be allotted to sections or half-companies it will result in a healthy rivalry amongst these units, the men of which will be drawn together to individually work for the common good, which is the aim and object of the section system.
5. That the British taxpayer may be able to feel that the large sums he is paying annually for ammunition is expended in the proper way—not for paper results, but in real good practical work conducted under conditions as similar as possible to those of action.

I can quite foresee that grave objections will be raised to proposals so sweeping.

The individually good shot at a target will no longer, as heretofore, receive encouragement to excel, except, perhaps, at rifle meetings; he will have to shoot in the crowd, and shoot for the good of the section, receiving only his just proportion if successful.

Again, it will be urged the range difficulty, which is bad enough

where individual firing goes on, will be increased where more realistic and less carefully-aimed fire is necessitated.

I am quite aware of this ; but one of the aims and objects of this paper is to raise the question of the range difficulty. The future looks bright in this respect now that Government has allotted funds for the acquisition of improved ranges ; but I do hope that in their construction the necessities for all kinds of realistic practices will be kept in view, and money spent on the construction of really sound targets, representing infantry, cavalry, or guns ; at any rate, at all stations where considerable bodies of troops will have to be taught to shoot.

An immense amount of nonsense and exaggeration is being spread amongst a credulous country folk as to the range and destructive power of the new rifle by silly, and sometimes by designing, people, who hope to start up an opposition to ranges being maintained in certain localities to the end that the Government may be obliged to pay unreasonable sums.

If ranges are fairly well chosen as to position, background, etc., the danger from the Lee-Metford is little, if any, greater than with the Martini ; and, I fancy, few accidents have been recorded of late years, except to persons who found themselves on forbidden ground.

The artillery have been firing all kinds of missiles at Oakhampton at immense ranges for many years with almost absolute absence of accident to man, or even beast. I may here make a point of the fact that the whole of the rounds expended by the horse and field artillery at Oakhampton and elsewhere are fired under active service conditions.

It will be noted in the above paper that I have made no reference to the cavalry course of training, nor to revolver practices, both of which are capable of improvement, but to neither of which I propose to refer.

On the Militia course, however, there is something to be said. At present each man fires forty-five rounds—twenty individually and twenty-five in volleys—but all at fixed targets. There is consequently little or no exercise of fire discipline or training of section commanders, which are both much needed in our fine Militia force. I should suggest the issue of more rounds, and the third day's practice to be devoted entirely to sectional practices. The Militia course is, unquestionably, too much hurried through.

Again, this lecture would be incomplete without reference to the shooting training of the Volunteers, who have always shown so keen a desire to be up-to-date in all respects.

I am quite aware that, under their numerous difficulties, it requires great patience and energy on the part of the officers to get their men to do the qualifying class firing—viz., the firing of twenty-one shots, very indifferently, at a fixed target at 200 yards. But that something more than this is necessary, no keen Volunteer doubts for a moment.

As you are well aware, His Royal Highness the Duke of Connaught has identified himself with the movement, which, under the title of the "Field Practice Association," has for its aim the encouragement of the Volunteers to accustom themselves to shoot in sections, half-companies,

etc.—in fact, to shoot under active service conditions. At the annual meeting of this association in February last, His Royal Highness said:—"There are many good shots amongst the Volunteer corps, but collective firing is generally very bad; and I consider it most important for the Volunteers, as well as for the Regular Army, that field practices should be gone in for more than it is at present, and that every encouragement should be given to collective firing."

In proof of the favourable opinions expressed by those brilliant individual shots at objects in motion—the Boers—H.R.H. quoted from a letter he had received from an officer in South Africa, in which the writer said that the Boers were believers in good sectional firing as better than individual, although under the widely separated conditions of their lives, to practise it would be impossible to them.

But to compare our Forces—Regular or Volunteer—with the Boers, is an absurdity.

We must be prepared for all kinds of fighting, whereas they only require to get together from the four winds at the summons of their chiefs, and use their rifles from behind the rocks or crowded up in a wagon laager; and their rough-and-tumble sort of organisation has so far proved to be suited to their needs.

Our Regular Army must be trained to meet, if necessary, the best troops in Europe, and no one can possibly deny that the Volunteer forces should be trained on lines as *similar as possible* to those of the Regular Army. To attain this end we must labour on, patiently and indefatigably.

I would propose, therefore, a modified course for the Volunteers, more comprehensive than the present, more rounds being fired, at least half of which should be in sectional practices. I cannot say what can be done in this direction. It will depend upon how such ideas as mine are accepted. I can say what was done last summer by a company of the Galloway Rifles just after my annual inspection. It is located at a little place called New Galloway in Kirkcudbrightshire. Lord Minto offered a prize on the lines of the "Evelyn Wood," viz., for company teams of Regulars or Volunteers of twenty-four men, to march eleven miles in three hours and shoot in attack formation, marks being allotted not only for shooting but for marching, drill, and fire discipline.<sup>1</sup>

The prize fell to the section of the new Galloway company after only a few days' preparation, and under the difficulties experienced by all country corps.

Should it be judged wise to insist on more sectional practices, I feel sure that a strong effort will be made by all good corps to rise to the necessity. But there must be no uncertain sound about the order. In some cases, I think, the following plan might be adopted, although only where at least one really good range is available. It is obligatory that each corps should undergo, at least, three battalion drills before the

<sup>1</sup> The Hythe Report just issued foreshadows improvements which, I hope, will be carried out during the forthcoming year.

annual inspection. Now, could it not be arranged that two should be considered sufficient, on condition that the battalion should assemble once for a day's realistic shooting? If properly arranged, this work could be completed in a couple of hours, and would combine the benefit of a drill with that of a useful instruction in fire discipline and section leadership.

In my own district where the corps are much scattered and every company has its own little range there will be difficulties; but I intend to try and bring the arrangement about, this inspection season.<sup>1</sup>

The Volunteers are becoming, day by day, more and more imbued with the true military spirit—the spirit of discipline—and the keen ones—and they are in the majority—have for their aim and ambition to do real soldiers' work as far as possible. I am not out of sympathy with the professional match-shooter, he generally trains himself for his task; but half-a-dozen crack shots do not make a good shooting regiment, especially if the crack shots are only crack shots while lying in the prone position at a known range and at a fixed target.

I have a great admiration for the Queen's Sixty. They come through the ordeal, are undoubtedly fine fellows, and probably there is a general impression that they would make short work of any number of Soudanese "fuzzy wuzzies" or Burmese Dacoits. But it by no means follows that this would be the case, as they have never previously rehearsed the work of shooting quickly, steadily, individually, or in volleys, under conditions which would be necessitated in combating a moving and agile enemy in a Burmese jungle or amongst the thorn-bushes of the Soudan.

A very acute lady once accompanied me to Wimbledon when I was shooting in the Army Eight, many years ago now. After watching the shooting generally, more especially that for the Queen's Prize, and having commented on the queer ways of Wimbledon men, she said, "Is all this supposed to be practice for real battle?" I replied that undoubtedly this was the *raison d'être* of the Meeting. "Because," she pursued, "I can't help thinking that were they to shoot like this in battle, an alert enemy would kill them all while they were engaged in taking aim."

I thought little of the remark at the time, but since then its force has often made itself manifest.

I have no hesitation in saying that I hope to see the day when the second stage of Her Majesty's Prize will be devoted entirely to moving and vanishing figures of men; to shooting at dummies impelled forwards and backwards, and to other devices calculated to develop the genius of true marksmanship.

The Queen's Sixty would then be sixty of the best shots in England, and the winner of the great prize would be a host in himself against any enemy—black or white, civilised or savage.

I hope that this subject generally may attract the attention of those keen soldiers, the Volunteers of Great Britain, and that they may think

<sup>1</sup> This has been done with excellent results.

my suggestions worth considering in a practical, sanguine, and resolute spirit ; for I feel that none amongst them would rest satisfied in the belief that he was a good target shot alone, and unprepared by practice and forethought to shoot under service conditions.

To shoot well at a fixed target requires nerve, patience, and coolness—all estimable qualities in a soldier ; but to shoot well in action is to have acquired the sportsman's instinct. If individually, the mind, the hand, and the eye must have become habituated to work in unison—the rapid calculation of chances and the rough estimation of distances ; while in sections or larger bodies these qualities will still be indispensable, order and discipline will play their useful part by controlling and subordinating the efforts of each to the effort of the whole.

These remarks bring my paper to a close. I am deeply sensible of its incompleteness and of its other demerits ; but it is the result of my experience and the expression of deeply-rooted convictions.

One is always being told nowadays that to propose any change in Army affairs which entails expense is useless, as the Treasury is deaf to the cry of the War Office. This may have been so, but I hope is so no longer. (See the Army Estimates of the year.) John Bull is not a fool ; his education in military affairs has improved under the able tuition of those best entitled to tell him the truth, viz., the chiefs who have led his Armies to victory ; and he is no longer stingy as heretofore. So, having now spent vast sums on a new rifle—the most perfect on earth—he is not likely to, nor will he, refuse the money for improved ranges, practice-grounds, and appliances, by the acquisition of which alone its excellence can be developed to the uttermost.

As Lord Roberts remarked the other day, "Our Army is small : let it be thoroughly trained."

My belief is that in future wars, battles will not be won so much in consequence of the possession of this rifle or that, but as a consequence of the skill displayed in its use. At present, all rifles of the first order are exquisite beyond the most sanguine dreams of those who fought and won our battles with the Brown Bess, *but no Army has ever yet appeared in the field who could use them properly.* Should an Army strong in courage and enthusiasm, and composed of skilled shots, appear one day upon some European battle-field certain it is, that the effect of its infantry fire will be astonishing, and will more than compensate for inferiority of numbers, and even a lack of manœuvring power.

Surely the British Army could be made the best shooting Army in the world, as it is voluntary with long colour service, and composed of natural shots.

To this end all our efforts should be directed with untiring zeal, and for its attainment no expense or trouble should be spared. It is the pith and marrow of modern soldiering. We have only to foster and encourage the natural sportsman's instinct, which is, I conceive, a prominent characteristic of the Anglo-Saxon race, and we shall succeed.

The fire of a skilled infantry will, in the future, be terrible indeed ; with smokeless, noiseless power, with rapid firing, flat trajectory rifles, it

must be all-destroying. Surely it will be more than verifying the words of the world's greatest military genius, expressed in his exile, as the experience of a hundred fights, fought a century before modern arms of precision had ten-fold intensified its effect :—

“Fire is everything,” says Napoleon, “the rest is of small account.”

Colonel VERNOR CHATER (Commanding 25th Regimental District) :— I have very few remarks to offer, as I thoroughly agree with the lecturer in everything he has said. He has told us that we cannot be too particular about the individual shooting of recruits. We ought to work them up in every way by giving them more rounds, and improving the prizes for shooting at a fixed mark ; but, that once being done, I cannot conceive anything better than the suggestion of Colonel Browne as to a course for drilled soldiers. As far as Volunteers are concerned, I may be allowed to say a few words. My district adjoins that of Colonel Browne, and I was chief umpire last year at that very competition in which the Galloway Rifles won, and which reflected great credit on them. They beat the two teams of Regulars, and fifteen other teams of Volunteers. I think that what Colonel Browne suggests as to the country companies, especially, having practice on the ranges as part of their inspection, is not very difficult. In fact, last year, in the case of two of my Volunteer battalions of the Border Brigade, I inspected them by companies at their ranges in marching order, etc., and, after inspecting the drilling, I made them all fire by sections at unknown distances. The consequence was that they practised at it, and expended a good deal of ammunition before the inspection, and over 90 per cent. of the men were exercised in sectional firing under my own eye. I think it would be a very good thing if that were made compulsory for all inspections. The inspecting officer could see them practising at the ranges. I think that, instead of firing the few class-firing rounds that most corps are content with, the minimum amount of seventy rounds, to make an effective soldier and earn the effective grant, should be made compulsory, twenty of which rounds should at least be in sectional volleys.

Lieut.-Colonel J. G. COCKBURN CURTIS (late Oxfordshire Light Infantry) :— I think everyone who has heard the lecture must agree generally with the view which Colonel Browne has enunciated—namely, that the soldier should be trained to a greater extent in peace-time to shoot under the disturbing conditions of war. One of the disturbing conditions which one can reproduce easily, is to make the soldier run before he fires. Perhaps that expedient is not resorted to as often as it might be. It has been my duty, as Assistant-Adjutant in the Bombay Army, to have frequently to remark on schemes and suggestions submitted, in order to make the shooting of the Army more practical. The great stumbling-block I have always found in the way is the question of disposing of the prizes. As a rule, it is thought the prizes always encourage excellence. On the other hand, the most advanced educators of the day consider that prizes produce many mischievous effects in schools. Now, Colonel Browne suggests that all the money for prizes, instead of being given to individuals, should be allotted to sections or half-companies, to encourage them to shoot well in collective or war practices. But when prizes are given for war practices it is everyone's interest to find a way of firing under the easiest circumstances, and to ignore such disturbing conditions as exist in war. Further, in prize competitions each competing body must carry out rigidly identical conditions, so the element of surprise or variety cannot be introduced by the director of the exercise.

Lieut.-Colonel Sir JAMES DE HOUGHTON, Bart. (4th Bn. Lincolnshire Regiment) :—I rise to make a few remarks with regard to the Militia, as no Militia officer has yet ventured to speak. As I belong to the Militia, perhaps you will allow me to



refer first to the paragraph in the lecture dealing with that subject. The lecturer advocates increasing the number of rounds allotted to the Militia. Perhaps Colonel Browne has not spent much time with a Militia battalion, otherwise I think he would agree with me and with a great many Militia officers that, if anything, we have too many rounds now—not too many rounds to instruct the soldier to shoot, but too many in proportion to the very small time at our disposal; and not only on account of the small time at our disposal, but also on account of the conditions under which we work. We are hurried; it is a scramble from beginning to end. If you increase the rounds, you increase the scramble, and you decrease the efficiency of the teaching. One way in which we might improve the shooting of the Militia is to do what was done a few years ago in the Regulars—that is, to abolish the musketry instructor. I do not know whether there are any musketry instructors here; I do not mean any offence to them, but my argument is simply this: at present the musketry instructor goes on the range at six o'clock in the morning, and comes off at about four or five o'clock in the afternoon. Now, no individual can keep up his energy during a long period like that—probably in the hottest time of the year. He does the musketry while the company officer sits down, or at all events feels that he is not responsible for the work. I suggest doing away with the musketry instructor, and making the Militia officers do their work. Why should not a Militia captain be able to train his men as efficiently as a Line captain? If that were done, you would do away with one cause of the difficulty. You would not have a single man from one end of the month to the other, or from one end of the day to the other, on the range, but you would have an officer interested in the shooting by his own men. At present it is in the hands of one individual, who must naturally get sick of it. I have not always been a Militiaman: I served in the Line twenty-one years, and I was connected with musketry nearly the whole of that time—as an assistant-instructor, as a regimental-instructor, and as a captain-instructor, and also D.A.A.G. at the School of Musketry, Hythe. I quite agree with Colonel Browne in his remarks; but he rather disguises the question of shooting at Bisley. I am fond of shooting, but I never decline to speak out my thoughts, and to say that I consider Bisley one of the great enemies to the progress of musketry in the Army. Our men fire there under conditions which never obtain on service, and they gradually get the impression that if they have not favourable conditions, if they do not know the range, if it is a cloudy day, and there is a changing light, they cannot shoot. It also produces this effect, that the men consider, that if they are not amongst the prize-winners of the great shows, they are of no use as soldiers. I do not think that is right; I am certain it is wrong. I am certain that in practice the well-trained man, the ordinary shot of the battalion, in action is every bit as useful and good as is the "marksman." I have tried it practically; I have taken sections of marksmen and tried them against sections of ordinary shots in the field under service conditions. The difference is nothing, or there may, perhaps, be a slight difference on one side or on the other. With regard to Colonel Browne's scheme, I agree with it to a great extent but not entirely. I am for reducing the number of individual rounds, and increasing the amount of sectional practice. That is quite right; but in the scheme we have had brought before us I think there is more or less blemish, and that for this reason: the object of our individual practice is to teach the soldier what sight is required for the distance at which he fires. In this scheme there is no provision for that. If a man knows that his rifle is, say, 50 yards under-sighted or over-sighted at a range of 600 yards, he will know what it will be at 700, or 900, or 1,000 yards, as the sights are graduated by machinery. In this scheme there is no provision made for it. Then, again, though a soldier might know that his rifle is properly or improperly sighted at one part of the globe, say at the sea level, then if he has no firing in individual practice at a fixed target and suddenly finds himself shooting, say, in the hills in India, at an altitude of 5,000 feet, he will know nothing about the sighting of his rifle. That

is only a detail, but it occurred to me on hearing the lecture read. Then there is another point which struck me as rather peculiar. Many of you must have read the excellent book written by Captain Mayne, R.E., on *Fire Tactics*. A considerable portion of the book is devoted to the theory of attaining good practical results in a simple and practical manner, that is to say, using one sight, what is called a fixed sight, and aiming at the ground line. The book was published many years ago, but the principle was not recognised. At last it has been recognised, and I think there is great value in it, because it shows a man how he can produce good effects in the field in the simplest way, without everlastingly thinking, "What range am I at?" and "What part of the enemy do I fire at?" Now he knows that within a certain distance he uses one sight, he fires at one spot, and produces a good result. I think that is quite sound. The odd part of it is, that the soldier is never taught that as an *individual*. You ought to teach a man individually what you want him to do collectively in a section. I should like to mention a curious circumstance in regard to that. When the Lee-Metford rifle was first brought out, there was a practice called the "Individual attack," which consisted in firing a certain number of rounds at unknown distances between 550 and 200 yards, always advancing or retiring, the target being 4 feet high. It was found that the percentage of hits was invariably extremely high, and many of the men got the highest possible score, showing that there was a simple and effective method by which a man could do what he wanted—hit the object he was firing at, without bothering about sights or distances, and using one sight only. Now, that practice was cut out, for this reason, that it was found too easy. It always struck me as being extraordinarily illogical that, having shown a soldier how he can do without effort that which he is wanted to do, you immediately say he is not to do it any more. I think that is a blemish in our course at present. There is another point which the lecturer touched upon, and which he might have made much stronger; I refer to the question of ranges. That is a very important question. You know how many ranges have been closed all over the country. For what reason? I do not think anyone in this theatre can say why they should be closed. The official answer is that the Lee-Metford carries much farther than the Martini-Henry; that ranges which are safe with the Martini-Henry are no longer safe with the Lee-Metford. I believe that a great injury has been done to all classes of soldiers—Regulars, Militia, and Volunteers—by this indiscriminate and useless closing of ranges. It is useless, for the simple reason that there is practically no difference in the ranges of the two rifles. There has been an erroneous impression on the subject, which has done a lot of mischief. The range of the Lee-Metford is about two miles, or a trifle over; the range of the Martini-Henry is about two miles, or a little under: the difference is only the difference between Tweedle-Dum and Tweedle-Dee. It is a pity, it is a shame, that so much difficulty should be placed, without cause, in the way of our efforts to improve musketry in the Army. I think that if those in authority really knew the facts of the case the grievance might be remedied.

Colonel COCKBURN CURTIS:—On the subject of accidents behind ranges, the great point in which the Lee-Metford rifle differs from the Martini-Henry is, that the longer bullets ricochet more widely right and left. The Americans dig a long gentle incline leading up to the platform on which the targets are placed. The incline is terminated by a steeply sloping bank, which catches many ricochets. The earth thus obtained is used for the stop butt.

Colonel MCKERRELL, R.M. (1st Vol. Bn. Royal Scots Fusiliers):—I have not much to say on this subject, but one or two remarks have been made in the discussion to which I may venture to refer. As a member of the Council of the National Rifle Association, I must say that I heard with some astonishment what was said by a distinguished officer on my left with reference to Bisley. If what he says is correct, we are altogether on the wrong tack—and we have been on the wrong tack for nearly forty years. I may

claim, Sir, that we are on the right tack. Before you can teach a man to shoot a moving object, or an object that is jumping about, or objects at unknown distances, you must first make him master his weapon at fixed distances and at standing objects; otherwise you are trying to teach a man to run before he can walk. The National Rifle Association has to teach the rifle-shooting section of the populace how to use its rifles at fixed targets and at known distances, because it would be utterly impossible to carry out competitions in any other way, when you have to deal with between 2,000 and 3,000 competitors at a meeting extending over ten or twelve days. If you really had to test the powers of 12, or 20, or even 100, crack shots, it might be possible, after letting them commence at fixed distances and known ranges, with fixed targets, to give them a certain number of tests at moving, advancing, and disappearing targets at known and unknown distances. But it is impossible to do that when you are dealing with a large number of competitors. With regard to the Militia, as a member of the Council of the N.R.A., I regret that we see so few of them at Bisley. A few come as range-officers, but I do not remember ever having met a Militiaman as a competitor.<sup>1</sup> Why do not the officers set an example to their men and come forward? Prizes are given by the Association, which are open to all branches of Her Majesty's forces. The duty of the National Rifle Association—the duty for which it was founded—is not only to give permanency to the Volunteer force, but to encourage rifle-shooting throughout the whole of Her Majesty's dominions. That is what I maintain the Council ought to do, and that is what it has done. With reference to what has been said as to the shooting of Volunteers, I may perhaps be allowed to make a remark upon it, as an officer commanding a battalion. The difficulty is this: In the Regular Service you order the men to shoot, and they have to do it. In the case of the Volunteers, we have to ask them to do it; it is a voluntary service, and you cannot enforce obedience, you can only induce the men to shoot. Everyone who knows anything about Volunteers will bear me out in that you can only use moral suasion, moral force—anything beyond that is out of our power. It is with great difficulty that we get the men to go through the minimum course in order to enable us to earn the capitation grant. The commanding officer's first object must naturally be to keep the finances of his battalion in a healthy condition, and to do that he must earn the capitation grant with the least expenditure. It is often difficult to make both ends meet. If we are to give men more musketry we must have more money and more cartridges, and that adds considerably to the expense, and is a serious drain upon the resources of a battalion. Then, again, if the Government wants us to do more in the way of shooting, it should give us increased capitation grants, especially with the view to excellence in the use of the rifle. Then it would be worth a commanding officer's while to sacrifice a great deal in order to obtain an addition to the capitation grant. These things depend upon the Government. With regard to the junior force, it does not do for us to cry out; we must do the best we can with what is given us. With regard to ranges, I agree with what has been said, that it was a regular bogey idea that the Lee-Metford was more dangerous than the Martini-Henry. As a matter of fact, the small bore (the old match rifle), which was used many years ago in the great matches, carried further than any others, yet there was no accident. I believe the reason is this: The idea was that the new rifle was far more deadly, and the result was that people who had long tolerated ranges jumped at the opportunity of kicking up a row about them and getting them considered unsafe. The ranges

<sup>1</sup> This appears to be a mistake, as a considerable number of the officers and permanent staff of the Militia annually compete at Bisley. Their names are to be found, not only in the competition for the United Services Challenge Cup, and in the Regular and Volunteer Officers' Match, but amongst the prize-winners in the Association Cup, Albert, Army and Navy Challenge Cup, General Eyre's Army Prize, Holland, and Imperial, and Revolver.—Ed.

have been examined in the county with which I am connected, and one or two of them have been condemned. But it does not matter so much there, because there are others which are equally good. Many regiments, however, instead of having ranges at their doors, have to go 10, 20, or 30 miles before they can fire a shot. If the Government wish the Volunteers to be as skilful in the use of the rifle as the bowmen were with their implements in the Middle Ages, they must give us ranges, and find us more money and more cartridges.

Colonel E. C. BROWNE, in reply, said :—I have very few remarks to make. I may be permitted to refer for a moment to what was said by Sir James de Hoghton with regard to the Militia. Of course, the whole course is, as it is done at present, a very hurried affair. The only way to get more shooting is to sacrifice, to a certain extent, the time given to battalion drills, and the question is, Will commanding officers ever consent to do this? I propose that a day should be given up entirely to sectional shooting, which means a three days', rather than two days', course. I think this change could be effected with beneficial results. Many of the men are old soldiers, and require little drill to steady them for battalion work on parade. Most commanding officers wish to make their regiments as smart as possible for the time of inspection, regarding shooting as a secondary consideration, which appears to me to be an evil. One speaker, in pleading the cause of individual shooting, said that the men are not taught to sight their rifles properly in sectional shooting. He is under a misapprehension. The men are taught to do so thoroughly, individually and collectively, and under service conditions.

The CHAIRMAN (General Sir Richard Harrison, K.C.B., C.M.G., R.E.):—Ladies and Gentlemen, You will look to me, no doubt, to say a few words in conclusion. We have heard this afternoon a very well-thought-out lecture by Colonel Browne, who has evidently studied his subject, and we have had what may be called a representative discussion, officers having given us their opinions on the subject—officers fully qualified to speak—belonging to all branches of the Service. I do not think I need say much in reference to what these gentlemen have said in the course of the discussion. I know full well the difficulty that the Militia have to encounter. I have inspected them over and over again, and I have gone very thoroughly with commanding officers into the whole question of their training, and have tried to impress upon the authorities that it is quite impossible to make bricks without straw. The same thing, to a certain extent, may be said in regard to Volunteers. Turning for a few moments to the lecture we have heard,—on first reading its title, which speaks of the instruction of our soldiers to shoot under active conditions of service, one naturally feels that soldiers should *always* be taught to shoot as they would shoot in war. But when one analyses the question a little, and considers what are the conditions under which a raw recruit is turned into a trained soldier, one arrives at the conclusion that there are two phases of instruction, and particularly of musketry instruction. This has been alluded to by one or two speakers. You must first teach a recruit to *use his rifle*. He has got to understand how it is formed and how it is sighted, how to put it to his shoulder, how to fire it off, and how to hit a standing mark. And when you have taught the recruit, you have to teach the partially-trained soldier the practical use of his rifle. Now, when you have to deal with this man, who is not quite efficient enough to take the field, the man whom I should like to call the second-class soldier, the instruction cannot, to my mind, be too practical. I hold entirely with the view expressed by Colonel Browne that every endeavour within the bounds of possibility should be made to give the semi-trained soldier a thoroughly practical instruction in musketry. The lecturer alluded to the instruction of the Field Artillery at Okehampton. I should like to enlarge a little upon that, if you will allow me. The artillery, very wisely in my opinion, have got hold of Okehampton and have stuck to it; and by the help of the officers with whom they were associated in the Western District they have made an exceedingly good and useful

range there. I speak under correction in the presence of a very distinguished artillery officer, but, to my mind, they have almost revolutionised the Horse and Field Artillery of this country by the exceedingly practical use they have made of that magnificent range at Dartmoor. In this case also there are two phases. The gunner who fires at Okehampton has been taught, as a recruit, the use of his gun. He has been taught the various phases of action before he actually puts his teaching into practice on that rough ground at Okehampton, and there is another thing I should like to mention in connection with that range, which is, that the artillery have put the whole instruction at Okehampton for the Horse and Field Artillery under the School of Gunnery at Shoeburyness. And what is the result of that action? Surely that regard is paid not only to material, not only to horses, not only to gun-carriages, but to having a really practical course of instruction in gunnery, which is the essence of the whole thing. What I am driving at is this: the artillery, by having a central authority to look after gunnery and to control it, have established an exceedingly valuable school at Okehampton. And it seems to me that the infantry require something of the same sort. At present we have, in the infantry, a signalling school at Aldershot, a musketry school at Hythe, a field-work school at Chatham, a gymnastic school at Aldershot, and a tactical school nowhere at all. Now, all these schools that I have mentioned (except the last one) are striving to improve the British infantry. But there is no guiding head to say how much shall be done in one direction and how much in the other. If there were some central school to control all these various branches in military training, I am certain that all other schools (the musketry one, perhaps, more than any) would be much more efficient, and more advanced than they are at the present day. Of course, one of the great difficulties in the way of practical musketry instruction that we have to encounter is the want of ranges, which has been already alluded to. The Government have now taken this matter up. And I hope there will be no longer any delay about it, but that there will be good ranges in every district, so that, as far as *ranges* are concerned, musketry instruction may be carried on as if before the enemy. This has been done to a certain extent already. The lecturer alluded to the practical exercises carried on in the North of England. In the Home District, where there are greater difficulties, but where we have an exceedingly energetic General Officer (who is usually present on these occasions, but whom I do not now see in the room), they have had some very practical exercises in musketry. Only last week I was acting as umpire at Bisley, and during the greater part of the day I was watching the squads, who marched, in marching order, from near London to Bisley, and then went through an attack in as practical a manner as possible. In one of these tactical exercises the "Telegraph" Cup was won by a section of Volunteers. Another cup was won by a section of a regiment of Militia. Yet all our Guards' battalions sent sections to compete for them. I think there is no fear but that all branches of the Service, if they only get sufficient opportunity, will avail themselves of it, and will very much improve. There is one other instance that I should like to mention—the practical exercise that has been carried out in the West, close to the scene of the artillery practice at Okehampton. In the years from 1891 to 1894 there was carried out every year in the Western District what I may call a real practical musketry exercise. It was not, I am sorry to say, visited by any of the high authorities (I wish it had been). It was under no central authority—as I think it ought to have been—and some of the papers, which I think did not know much about it, rather ridiculed the way in which the exercises were carried out. For myself, I think it was one of the most practical I ever saw, and I believe that all the officers who took part in it were of the same opinion. The exercise was carried out by four battalions of infantry, made up as for war; three batteries of Field Artillery, a company of Engineers, a company of the Army Service Corps, a detachment of the Medical Staff, and so on. They marched, under service conditions, from Plymouth to Okehampton, which took

them three or four days. An enemy consisting, of course, of dummies was placed in position among the Dartmoor Hills by a staff of umpires. The attacking force was formed up in column in the morning; the advanced guard then cleared the ground with scouts, and drove in the enemy's outposts, so that a reconnaissance could be made of the position. That was the first firing exercise. The reconnaissance was then made, and the artillery were brought into action and opened fire on the main position. The infantry, under cover of that fire, moved up in readiness for the main attack. The infantry then delivered the main attack. The enemy were supposed to have retreated, and they were pursued by the infantry, and it was discovered that they had taken shelter behind a small redoubt. The artillery were then brought up again and shelled the redoubt. Then there was the final advance of the infantry and the storming of the redoubt. I will not give you any more details. The attack took five hours. It was an exceedingly practical one, and was more like war than anything I have ever seen carried out anywhere. If the Government will only give us ranges, one certainly in every district, to enable us to have practical exercises, either like the one I have described in the Western District, or at all events like those carried out already in the North of England or in connection with the Home District, I cannot help thinking that we shall have eventually a very much more practical course of musketry than we have at present, and that the views of the lecturer as expressed this afternoon, will be carried out to the full. With these few words, I will ask you to give a sincere vote of thanks to Colonel Browne for his lecture, and also to thank the officers who have taken part in the discussion.



## ARMY CHAPLAINS AS MILITARY HISTORIANS AND DIARISTS, 1688—1712.

By CHARLES DALTON, Esq. (*Editor of "English Army Lists and Commission Registers, 1661—1714."*)

THE polyglot force which accompanied William of Orange to England in 1688 appears to have possessed only one English Army chaplain. This favoured individual was one John Whittle, who, in one of his publications, styles himself "sometime the only English chaplain in the Army." Whittle had held the post of chaplain to the English brigade in the service of Holland from the year 1684.<sup>1</sup>

In 1689, Whittle published "An exact Diary of the late Expedition of the Prince of Orange from his palace at the Hague to his landing at Torbay, and from thence to his arrival at Whitehall." This literary venture was well received, and we subsequently find Bishop Burnet (who accompanied the expedition as one of the Prince's private chaplains) quoting from the "Diary" in his "History of the Reign of James II." One episode of the landing at Torbay is humorously narrated by Whittle, who, after telling us about a "fair house" (Tor Abbey, which then represented Torquay) "belonging to Mr. Carey, a very rigid Papist, who entertained a priest in his house," goes on to say:—"The priest going to recreate himself on the leads on the top thereof, it being a most delightful day, as he was walking there he happen'd to cast his eyes towards the sea, and espying the Fleet at a distance, withal being purblind in his eyes, as well as blinded by Satan in his mind, he presently concludes that 'twas the French Navy (because he saw divers white flags) come to land the sons of Belial which should cut off the children of God, or, as they call us, the hereticks; and being transported with joy, hastened to inform his own disciples in the house, and forthwith they sang Te Deum."

In 1692, Whittle published a book of sermons entitled "Safety in War, or the Infallible Artillery of a Kingdom, Fleet, or Army in Sermons unto their Majesties Forces by Sea and Land." But his principal work appeared in 1693, which, though a very small book, bore a very long title, viz., "Constantinus Redivivus, or a full account of the wonderful providences and . . . successes that have all along attended the . . . enterprises of . . . William the 3rd, now King of Great Britain, etc."

<sup>1</sup> The Scots Brigade had their own minister, who presumably accompanied the expedition; but of him nothing is known. The English brigade consisted of the regiments now known as the Northumberland Fusiliers and the Royal Warwickshire Regiment; also Colonel Cutts's regiment, which was disbanded in 1698.

Reference is briefly made in the preface to this work of the author's military services in Flanders, England, and Ireland; and of his being wounded in the Irish campaign.

In 1690, the Rev. Andrew Hamilton, rector of Kilskerrie, co. Fermanagh, brought out his "True Relation of the Actions of the Inniskilling Men from December, 1688, for the Defence of the Protestant Religion and their Lives and Liberties." The gallant author of this little work raised a troop of horse and a company of foot at his own expense, and accompanied the Inniskilling forces, to whom he was chaplain, in their various raids and expeditions. He was not only an eye-witness of what he describes, but an actor therein. His property suffered severely at the hands of King James's troops, and he was attainted by James's Irish Parliament of 1689. In August, 1689, Hamilton was sent by the governor of Enniskillen on a special mission to King William and Queen Mary. He was the bearer of a certificate signed by the governor of Enniskillen, and the principal officers in that town, setting forth Hamilton's services to the Protestant cause and testifying to his "constant" "painful" preaching. He died in 1691.

Another member of the Church militant, who had passed through very stirring scenes, rushed into print early in 1690. This was the Rev. John Mackenzie, minister of Cookstown, who was one of the eight Presbyterian clergymen who took refuge in Londonderry in 1688. Mackenzie became chaplain to the Rev. George Walker's regiment of Derry Volunteers, and regularly officiated at the Presbyterian service in the Cathedral during the celebrated siege. Walker having published his "True Account of the Siege of Londonderry" (printed in London) towards the close of 1689, Mackenzie, in 1690, published his "Narrative of the Siege of Londonderry, or the late Memorable Transactions of that City faithfully represented to Rectify the Mistakes and Supply the Omissions of Mr. Walker's Account."

Putting aside the leavening of jealousy and spite which runs through the pages of Mackenzie's "Narrative," his account of the siege is most interesting and realistic. This reverend gentleman openly accuses Walker of having given himself out to be governor of the city during the latter part of the siege, when Colonel John Michelburne was *de facto* and *de jure* sole governor. "And how far," says Mackenzie, "he (Mr. Walker) was from being esteemed Governor of the Garrison, even after Governor Baker's death, may appear by the following testimony of one of Major-General Kirk's officers, who commanded the soldiers in the Phoenix when Derry was relieved, and showed great resolution in this eminent piece of service:—'As I was commanded in person with my detachment by Colonel Mitchelburn, Governour of Derry, so during my stay there I observed in every particular, and upon all occasions, he not only was, but acted as sole governour, and was the only person that application was made to as such.—Fiennes Twisleton.'"

Everything appears to have been topsy-turvy in Londonderry during the siege, and although Colonel Michelburne was undoubtedly the military commandant and recognised governor; yet the Rev. George Walker, who,

it must be remembered, was likewise colonel of a regiment, was civil governor, and as such was on a par with Michelburne. There were, in fact, two governors of Londonderry, and though they did not sit on one throne, like the two kings of Sparta, it is on record that both Michelburne and Walker used the same saddle !<sup>1</sup> An anonymous writer having attacked the "Narrative," Mackenzie replied in "Dr. Walker's Invisible Champion foiled, or an Appendix to the late Narrative of the Siege of Derry, wherein all the Arguments offered in a late Pamphlet to prove it a false Libel are examined and refuted." Walker's death at the Boyne closed this controversy. Mackenzie died in 1696, and was buried in Derryloan churchyard.

We now come to two Army chaplains to whom we are indebted "for the only two full, circumstantial, and tolerably unprejudiced contemporary histories (by actual eye-witnesses) of our two great wars of the seventeenth century."<sup>2</sup> The authors in question were the Rev. George Story, chaplain to the Earl of Drogheda's Regiment of Foot, and the Rev. Edward D'Auvergne, chaplain to the Scots Foot Guards. In the spring of 1689, Story was appointed chaplain to Sir Thomas Gower's Regiment of Foot, which was sent to Ireland a few weeks afterwards. This corps suffered severely during the autumn and winter of 1689, when encamped before Dundalk, the colonel and many of the officers dying of fever. Story gives a pitiable account of the sufferings of the soldiers in their plague-stricken camp before Dundalk. Death became so familiar as to produce utter heartlessness. Men to whom the chaplain had given spiritual ministrations in the morning, were found dead when he returned to visit them in the evening; and their corpses had been utilised by their callous comrades as mattresses, or as stop-gaps to keep out the cold winds which penetrated the chinks in their ill-built wooden huts. Truly the lot of a chaplain in the Irish campaign was not a happy one. Story gives the following amusing anecdote in his graphic account of the first siege of Limerick:—"I cannot omit a pleasant adventure that fell out at the taking the fort between a chaplain in the Army and a trooper. This chaplain hapned to go down after this fort was taken, and seeing a trooper mortally wounded, in all appearance, he fancy'd himself obliged to give him his best advice; the other was very thankful for it, and whilst they were about the matter comes the sally. Our Horse came thund'ring down, at which the clergyman, making haste to get out of their way, he stumbled and fell down. The wounded trooper, seeing him fall, judg'd he had been kill'd, and stept to him immediately to strip him, and in a trice had got his coat off on one side; the other call'd to him to hold, and ask'd him what he meant. '*Sir (says the other), I beg your pardon; for I believ'd you were kill'd, and therefore I thought myself oblig'd to take care of your clothes as well as you did of my Soul.*'"

After serving throughout the Irish campaign, 1689-91, Story published

<sup>1</sup> See article on Colonel John Michelburne in the "Dictionary of National Biography."

<sup>2</sup> "History of the British Standing Army," by Colonel Walton, C.B., p. 765.

his "Impartial History of the Wars in Ireland" (printed in London in 1693) in two parts. This able author was appointed in 1694 Dean of Connor, which post he held until 1704, when he was transferred to the Deanery of Limerick. He died in 1722.

The Rev. Edward D'Auvergne, to whom passing reference has already been made, was son of Philip D'Auvergne, of the Isle of Jersey, and wrote the "History of the Campaigns in Flanders, 1691-1697." This work, which was brought out in yearly parts, was printed in London. It gives a succinct and reliable account of the campaigns in Flanders for the above-named period, enumerating the regiments engaged in the various battles and sieges, and supplying lists of the killed and wounded which are invaluable to the compilers of regimental records. After serving as chaplain for a short time to the Earl of Bath's regiment, D'Auvergne was appointed chaplain to the Scots Foot Guards, 1st September, 1693. He retained this post until 11th December, 1701, when William III. presented him to the living of Great Hallingbury, Essex, where he died 7th November, 1737, aged 73.<sup>1</sup>

The following extract from D'Auvergne's "History," records the awful sentence inflicted on a French spy who was suspected of an attempt to blow up the powder waggons belonging to the Dutch train of artillery when on the march :--

"10th August, 1694. Upon this march to Nivelles [from Sombref] the colonel of the Dutch train of artillery visiting the ammunition waggons found a stranger in one of them that could give no good account of himself. He had got in by pretending himself to be of the Army, that he was weary and could not march, by which pretence and a little drinking money to the waggoner he got leave to get up in the waggon. The Dutch colonel that came to visit the waggons suspected him and caused him to be searched and found a lighted candle about him ; and besides he gave so ill an account of himself that he was soon discovered to be a Frenchman, and that he was come from the Enemies to endeavour to set fire to our ammunition for which he was sent to the provost, . . . . September 1st, the prisoner was burnt alive after he had first his right hand cut off and flung into the fire."<sup>2</sup>

Passing on to the War of the Spanish Succession we find two Army chaplains keeping journals of the campaigns in which they served. Neither of these "Journals" has been printed *in extenso*, but have been largely drawn upon by subsequent historians and military writers, as will presently appear.

On the death, in February, 1703, of the Marquis of Blandford, the Duke of Marlborough appointed his late son's tutor, the Rev. Francis Hare, of King's College, Cambridge, chaplain to Chelsea Hospital, and

<sup>1</sup> Colonel Chester's "Westminster Abbey Registers," p. 41.

<sup>2</sup> The ingenious Captain George Carleton has managed to introduce this episode into his "Memoirs," and states that this spy was handed over to him as captain of the guard on the day in question.

in the following year Mr. Hare accompanied his noble patron to Flanders in the capacity of chaplain-general.<sup>1</sup>

He was present at the battles of Schellenberg<sup>2</sup> and Blenheim and received £20 as his share of prize-money for the latter great victory. Marlborough, as is well known, was more at home with his sword than his pen, and his arduous duties gave him little leisure for writing lengthy dispatches. Finding that Mr. Hare, who acted as the Duke's chaplain, had the pen of a ready writer and that he kept a full journal of the stirring scenes of which he was an eye-witness, the Duke utilised Mr. Hare's scholarly narrative when asked to send a detailed account of the battle of Blenheim to Secretary Harley.<sup>3</sup> Hare, on whom the degree of D.D. had been conferred in 1708, served throughout the Marlborough campaigns in Flanders, and was a spectator of the surrender of Bouchain on 13th September, 1711. When Marlborough's management of the war in Flanders had been called in question by his political opponents we find Dr. Hare strongly upholding his patron's conduct in "Letters to a Tory M.P. on the Management of the War" (1711), which were printed and had a very extensive circulation. In 1715, Dr. Hare's services were rewarded by the Deanery of Worcester, which was, in 1726, exchanged for that of St. Paul's. In 1727, Dean Hare was appointed Bishop of St. Asaph, and four years later was translated to the See of Chichester. He died 26th April, 1740.

Another Army chaplain, whose name unfortunately is unknown, wrote a valuable MS. narrative, entitled "Designs for a Descent in France, and the Campaigns in Spain from 1706-1712." This MS. journal formerly belonged to Bishop Burnet, who freely quotes from it in his "History of my own Time." And long extracts from this chaplain's narrative are given by Tindal in his "Continuation of Rapin's History of England." From these same printed extracts it is easy to see that the narrator, who was an eye-witness of the scenes he so well describes, was a man of education and discernment. It is a matter for regret that the MS. itself cannot be traced.

<sup>1</sup> Hare's commission as chaplain-general is not forthcoming, but we have it on the Duke's authority that, "Mr. Hare has served abroad as chaplain-general to the Army for these three years past." See letter from Marlborough to the Bishop of London, dated 7th February, 1707, given in Sir George Murray's "Marlborough Dispatches," Vol. III., p. 311.

<sup>2</sup> The detailed account of the battle of Schellenberg, extracted from Hare's "Journal" (now at Blenheim Palace) is given in the "Marlborough Dispatches," Vol. I., pp. 332-338.

<sup>3</sup> The following letter from "Mr. Cardonnel to Mr. Secretary Harley," dated from "Camp at Weissenburg, 25th September, 1704," refers to Mr. Hare's "Journal" and the use made of it:—

"Sir,—I have received the honour of your letter of the 29th past, wherein you desire a relation of our campaign under my Lord Duke, in answer to which you may be pleased to be informed that his Grace has committed the care of it to one of our chaplains, an ingenious gentleman. He has the use of my books and will be very exact in every particular. His Grace takes the pains to peruse it himself, and as soon as we come home it shall be submitted to your correction before it goes to the press." Dispatches, Vol I. p. 409.

## NAVAL NOTES.

HOME.—The following are the principal appointments which have been made : Captains—J. M. McQuhae, C.B., to "Australia"; J. E. Goodrich to "Pearl"; W. D. Acland to "Indus"; A. Schomberg to "Victorious." Commanders—R. Travers to "Thrasher"; H. P. Freeman to "Mohawk"; and C. H. Treherne to "Lightning."

The first-class armoured cruiser "Orlando," which is approaching the end of her third commission as flag-ship on the Australian station, is to be relieved by the first-class cruiser "Royal Arthur." The first-class cruiser "St. George," flag-ship at the Cape, is, so it is reported, to be relieved by the second-class cruiser "Doris"; this change to a smaller vessel is said to be due to the fact that the larger cruisers draw too much water to enter many of the harbours on the station, so the admiral is continually being obliged to shift his flag. Two of the new light-draught river gun-boats, the "Jackdaw" and "Heron," are on their way out to the Niger in sections, their officers and men are also proceeding by mail; on the arrival of the gun-boats at Forcados they will be put together, and will then proceed up the river to Boussa for the protection of British interests in that quarter; the stationing of these gun-boats on the Niger is, without doubt, a most important step on the part of the Government. The first-class battle-ship "Trafalgar" has arrived at Portsmouth from the Mediterranean; she is to take the place of the "Inflexible" as port-guard-ship at that port, and will be a formidable addition to the fleet kept ready for mobilisation in home waters. Another important addition to the home fleet is the substitution of the first-class battle-ship "Rodney" for the second-class battle-ship "Edinburgh" as First Reserve ship at Queensferry, the "Rodney" having been commissioned for this purpose on the 22nd ult. The Reserve Squadron at present in commission in the home ports is a formidable one, consisting, as it now does, of six first-class and three second-class battle-ships, two first-class armoured cruisers, two second-class, and two third-class cruisers with six first-class torpedo gun-boats. The first-class cruiser "Crescent," bearing the flag of Sir James Erskine, K.C.B., having been relieved at Halifax by the "Renown" arrived at Portsmouth on the 23rd ult., having averaged a speed of 14 knots during the passage home; on her paying-off trial her engines developed 10,400-I.H.P., giving a speed of 18.5 knots, which was regarded as satisfactory as her bottom is very foul; she is to be paid off into the Reserve. The third-class cruiser "Pearl" is commissioned for service on the North American and West Indian station, she relieves the "Tartar," a much smaller vessel. The third-class cruiser "Mohawk" has been commissioned to relieve the third-class cruiser "Rapid" on the Australian station, and a new crew for the first-class gun-boat "Pheasant" has been sent to Esquimaux *via* Montreal and the Canadian Pacific Railway. The new first-class cruiser "Powerful," after completing a series of progressive trials in Stokes Bay, has left for China. The object of the trials was to ascertain the amount of H.P. required to propel the ship at given speeds. She had four runs over the measured mile at 10 knots, and a similar run at 14 knots, and it was ascertained that she maintained a mean speed of 10.4 knots with 2,300-H.P., and 14.1 knots with 5,400-H.P.

The new third-class cruiser "Pelorus," whose engines since she was commissioned some three months ago have given a good deal of trouble, has now satisfactorily concluded her trials, reaching a speed of 19.7 knots without any difficulty under natural draught.

The new second-class cruiser "Arrogant" has completed her trials, which have been delayed in consequence of the strike in the engineering trade. The engines



were worked by naval artificers and stokers, and the results were extremely satisfactory, a mean speed of 19·6 knots being maintained during the eight hours' full-power trial. The mean results of the trial were as follows:—Mean steam in boilers, 250 lbs.; ditto at engines, starboard 244 lbs., port 244 lbs.; steam cut off in high-pressure cylinder, starboard 69·7 per cent., port 71 per cent.; vacuum, starboard 26, port 25·9; revolutions, starboard 141, port 140·7. The mean pressure in cylinders was:—High starboard 105, low starboard 107; port intermediate 43·9, starboard 39·7; port low 19·3, starboard 20·3. The I.H.P. was:—High-pressure, starboard 1,545, port 1,575; intermediate starboard 1,689, port 1,496; low starboard 1,495, port 2,040. This gave a total for the starboard engines of 5,179, and for the port engines of 5,111, the gross total being 10,290 and the speed 19·6 knots. The draught was 20 feet forward and 22 feet 1 inch aft.

During her 30 hours' trial at 2,000-H.P., the mean results were as follows:—Steam in boilers, 230 lbs.; steam at engines, starboard 207 lbs., port 210; cut off in high-pressure cylinder, starboard 22·4 per cent., port 24·3 per cent.; vacuum, 26·6; revolutions, starboard 88, port 86·9. The mean pressure in cylinders was:—High pressure, starboard 40·1 lbs., port 41·3; intermediate starboard 15·8, port 12·7; low pressure, starboard 6·2, port 5·5. The I.H.P. registered was:—High pressure, starboard 369, port 375; intermediate starboard 379, port 303; low pressure, starboard 390, port 341; making a total on the starboard side of 1,138, and on the port side 1,019, or a gross total of 2,157. The speed attained was 12·5 knots.

During her 30 hours' run at nominally 7,000-H.P., the engines really developed 7,624-I.H.P., giving a speed of 17·8 knots. The mean results were:—Steam in boilers, starboard 246 lbs., port 248 lbs.; steam at engines, starboard 234 lbs., port 241 lbs.; steam cut off in high-pressure cylinder, starboard 51 per cent., port 60 per cent.; vacuum, 27 and 27·3; revolutions, starboard 128, port 127·4; mean pressure in cylinders, high 87·4 lbs. starboard, 86·2 lbs. port; intermediate, 35 lbs. starboard, 34·7 port; low, forward, 15·7 lbs. starboard, 15·8 lbs. port. The I.H.P. was:—1,157 starboard, 1,147 port; intermediate, 1,225 and 1,210; low, forward, 1,443 and 1,442; making a total for the starboard engines of 3,825, and for the port of 3,799; a gross total of 7,624. The draught of water for ward was 20 feet 4 inches, and aft 22 feet 3 inches. The mean coal consumption per I.H.P. of 7,624 worked out at 2·101 lbs., compared with 2·84 lbs. for an I.H.P. of 2·157 at her previous trial.

The result of the thirty hours' run to test the coal consumption under varying conditions was as follows:—During the first eight hours the steam cut off in the high-pressure cylinder was 51·3 per cent., which gave an I.H.P. of 2,087. The coal consumption for the main engines was 4,909 lbs., and per I.H.P. 2·35 lbs.; that for the auxiliary engines was 962 lbs., making a total coal consumption of 2·81 lbs. per I.H.P. After this the cut off was altered every few hours, with the following results:—

Hours.	I.H.P.	Cut off.	Coal for Main engines.	Coal per I.H.P.	Coal Auxiliary engines.	Total Coal Consumption.
9—15	2,143	23·8	4,941	2·30	1,261	2·89
16—19	2,057	23·8	4,227	2·05	2,221	3·13
20—23	2,195	33·9	4,673	2·12	1,838	2·95
24—27	2,220	51·3	4,564	2·05	1,752	2·84
28—30	2,216	60·0	4,912	2·21	1,870	3·06

The mean coal consumption for the main engines by themselves was 2·1 lbs. per I.H.P., and with the auxiliary engines also working, 2·81 lbs. The average

speed was 12·48 knots. During the second half of the trial, viz., fifteen hours, the mean revolutions of the feed pumps in the aft stokehold supplying the main engines were 10·5, and in the forward stokehold 5, making a total of 15·5. During the last fifteen hours of the previous trial, at 2,000-H.P., the mean revolutions were 13·7. Before returning to Devonport the "Arrogant" carried out her anchor trial with satisfactory results.

Arrangements are being made at Devonport for the berthing of three third-class cruisers, which are expected to be delivered from their builders during the next two months. They are the "Pegasus" and "Pyramus," building by Palmer and Co., at Jarrow-on-Tyne, and the "Pactolus," by Sir W. G. Armstrong and Co., Newcastle-on-Tyne. Although they will go to Devonport under their own steam, a large amount of work will have to be done on them, both by their contractors and the Government staff, after delivery; in fact, the dockyard alone has authority to spend £21,000 in equipping them for sea service. These vessels belong to a set of five ordered by the Admiralty in May of last year. They have a length of 300 feet, beam of 36 feet 6 inches, mean load draught 13 feet 6 inches, and a displacement of 2,135 tons. They are guaranteed to develop 7,000-I.H.P. with forced draught, calculated to give a mean speed of 20 knots on a four hours' run, whilst an I.H.P. of 5,000 is guaranteed on an eight hours' natural-draught trial, when a speed of 18½ knots is expected. Each vessel will be armed with eight 4-inch and eight 3-pounder Q.F. guns, besides which they will be furnished with machine-guns of the Maxim type, and tubes for discharging Whitehead torpedoes. The other two vessels of the same type are the "Perseus," and "Prometheus," building at Earl's Shipbuilding Yard, Hull, and for the completion of which Sheerness Dockyard is to be held responsible. All five are to be ready for hoisting the pennant for foreign service by the 30th of November next. The total estimated cost of each ship fully equipped for service is as follows:— "Pactolus," £144,988; "Pegasus," £139,794; "Pyramus," £139,964; "Perseus," £133,231; "Prometheus," £133,471. Although the "Pactolus" will cost £11,757 more than the "Perseus," she will be completed at a much smaller cost than the "Proserpine," a cruiser of precisely similar type, which is being built at Sheerness at a total estimated cost of £160,121.

The Admiralty have ordered the dockyard authorities at Devonport to get out designs for a round-bottomed vessel which is to be built for the purpose of teaching our gunners to fire from a rolling platform. The new vessel will be about 150 feet long, and when completed will be attached to the "Cambridge" gunnery school-ship. There are already in use platforms mounted ashore and so constructed as to roll in a manner to imitate the motion of a ship in a sea-way, but we believe that this "rolling motion" vessel will be the first vessel of the kind ever built in our Navy.

The new torpedo-boat destroyer "Chamois," built by Palmer's Shipbuilding Company at Jarrow-on-Tyne, has completed her trials at Portsmouth. She made her runs over the measured mile in Stokes Bay, with a mean speed of 30·026 knots and 388·8 revolutions, but for the three hours her mean speed was 30·396 knots, with 393·1 revolutions. The highest speed on the mile was 32·374 knots. The steam in the boilers was 228 lbs., and the air pressure 2·9 inches, but in the entire run the mean was 2·75 inches. The wind was against the tide, but, while the wind had little influence on the trial, the tide affected it materially, the lowest speed of the six runs being a little over 28 knots, while the highest was 32 knots. The coal consumption was economical. Not only did the engines fully answer expectations, but there was a marked absence of vibration. On a second three hours' run at 30 knots she was rather unfortunate. Starting at 8·45 a.m., the engines had worked up to their required speed when the vessel had to return

into harbour owing to a hot bearing. A new bearing was substituted, and the vessel started again, but the steering gear failed to answer, and it was found that a pin had been carelessly removed. This defect was made good, and a fresh start was made, the official trial commencing at 2.25 p.m. On the measured mile with 397 revolutions, a mean speed of 30.368 knots was maintained, and the mean speed of the three hours' run, with 394.4 revolutions, was 30.22 knots.

The "Mallard," another vessel of the same class built by Messrs. Thornycroft and Co., has also completed her three hours' coal consumption trial off Chatham. The results were satisfactory. The steam pressure in boilers was 211 lbs. per square inch, with an air pressure in stokeholds of 2.87 inches, and the revolutions per minute were 398.1 starboard, and 395.9 port. The engines developed 5,749-H.P., and the ship attained a mean speed on the three hours' continuous run of 30.201 knots, and a speed of 30.794 knots as a mean of six runs on the measured mile. The coal consumption was economical.

The torpedo-boat destroyer "Starfish," which is the last of the vessels of her class in the Portsmouth Reserve to have steel substituted for her copper tubes, had a satisfactory trial of her machinery yesterday.

Whilst the first-class armoured cruiser "Galatea," First Reserve ship at Hull, was engaged in target practice off the Lincolnshire coast, on the 22nd ult., the after 9.2-inch gun, at the second round, burst with terrific force, terribly wounding an able seaman named Halvey, who has since succumbed to his injuries. When the gun burst, a huge portion of it, a ton or more in weight, was hurled through the roof of one of the officer's cabins, cutting up the iron and wooden deck like so much paper. An officer was in the cabin at the time, leaning against the bunk, a few inches from the spot. The mass of metal simply pulverised everything in the cabin, books, instruments, uniform, pictures, and woodwork. The officer was knocked down, but managed to get out of the wreckage by wonderfully good fortune, with no worse injury than a severe shaking and bruises. The iron bulkhead between his cabin and the smoking-room was torn to pieces, and a number of pieces of the gun passed through and wrecked the room. The size of the cabin was about 7 feet by 9 feet, and 7 feet high. The size of the hole made through the deck was nearly 3 feet by 2½ feet, and through the iron bulkhead into the smoking-room 2½ feet by 2 feet. The gun had been examined by experts about three weeks previously, and the first shot after the inspection was fired on the day of the accident. Palliser shells and brown powder were used, and the gun was a composite one of modern construction, built up in the usual manner.

In thick weather on the 29th ult. the torpedo-boat destroyers "Thrasher," Commander R. H. Travers, and "Lynx," Lieutenant and Commander J. G. Armstrong, went ashore on Dodman Point on the south coast of Cornwall. Both vessels were attached to the Devonport instructional flotilla, and with the "Sunfish," Lieutenant and Commander A. Farrington, left St. Ives at 3 a.m. on the 29th. The "Sunfish" put into Falmouth, but the "Thrasher" and "Lynx" continued the voyage up Channel. The two vessels were steaming line ahead, the "Thrasher" leading. The usual precautions as to sounding were taken. The "Thrasher," however, struck upon a ridge of rocks, and, owing to the density of the fog and the short distance which separated the two vessels, was unable to give warning to the "Lynx" in time to prevent her from going ashore also. After the "Thrasher" struck, the boiler or steam pipes in her fore stokehold burst. Five of the stokers were scalded, three of them being killed, while a fourth was so terribly injured that he died soon afterwards. Information of the disaster was telegraphed to Devonport and Falmouth, and the Government tug "Trusty" was despatched to the spot in charge of Staff Captain Osborne, with a medical officer and surgical appliances. The torpedo gun-boat "Spider" and

the torpedo-boat destroyer "Ferret" were also sent to the scene. As the tide rose in the afternoon both vessels floated off the rocks, and it was found that the "Lynx" was able to proceed under her own steam to Devonport. The "Thrasher" was, however, very badly crippled, her back apparently being broken. She was taken in tow by the "Triton," a Falmouth tug, the "Trusty," and another Government tug manned by a number of coastguardsmen, and was taken to Falmouth, but has since been towed to Devonport, where the repairs to both vessels have been taken in hand.—*The Times and Naval and Military Record.*

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CHINA.—On the 15th ult. the first of three cruisers which are being built for the Chinese Government was launched from the Vulcan Yard at Stettin in the presence of the members of the Chinese Legation and of the Minister Hsu Chin Cheng, who performed the christening ceremony after the sacrifice, according to Chinese custom, of a pig and a sheep on board. The cruiser was named the "Hai Jung," or "Wide Ocean." Her dimensions are as follows:—Length 328 feet, beam 41 feet, draught 23·7 feet. When fully armed and carrying 220 tons of coal, the ship will have a displacement of 2,950 tons, and a mean draught of 16·4 feet. She has two screws, driven independently by engines which indicate 7,500-H.P., and the maximum speed guaranteed is 19½ knots. The cruiser carries three guns of 15 centimetres (5·8 inches) calibre, and eight of 10·5 centimetres (4·1 inches) by Krupp, all Q.F., six Maxims, and one gun for a boat. There are three torpedo-tubes, one below the water-line and two on deck. Of the numerous watertight compartments several on the water-line are filled with coal.

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FRANCE.—The following are the principal promotions and appointments which have been made: Vice-Admirals—E. Humann to Command-in-Chief of Mediterranean Squadron; E. P. A. Barrera to Command-in-Chief of the Squadron of the North; A. A. Gervais to be President of the Council of Works of the Navy; J. Cavalier de Cuverville to be an Inspector-General of the Navy; F. Fournier to be Maritime Prefect of the 2nd *Arrondissement Maritime* (Brest); L. H. Brown de Colstoun to be an Inspector-General of the Navy; C. E. de la Jaille to be Maritime Prefect of the 5th *Arrondissement Maritime* (Toulon). Rear-Admirals—F. Fournier to be Vice-Admiral; C. H. Godin to the Command of the Reserve Division of the Mediterranean Fleet; C. de la Bonninière de Beaumont to be a Member of the Naval Council of Works; F. A. Michel to be Chief of the Staff to Vice-Admiral Humann. Capitaines de Vaisseau—F. E. Pénaud and P. C. Gourdon to be Rear-Admirals; E. J. F. Boisse to "Brennus"; E. L. Ternet to "Amiral-Duperré"; L. Barnaud to "Courbet"; C. T. R. Rouvier to be Chief of the Staff to Vice-Admiral Barrera. Capitaines de Frégate—P. Gervaise to "Durance"; V. F. Sauvan to "Lalande"; L. V. Marin-Darbel and L. J. Berryer to be Capitaines de Vaisseau.—*Le Moniteur de la Flotte.*

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Several important changes were made in the higher grades of the Navy last month. Vice-Admiral Duperré after a period of service extending over fifty years retires, being succeeded by Vice-Admiral Gervais as President of the Council of Works of the Navy. Vice-Admiral Cavalier de Cuverville, who has just vacated the command of the Mediterranean Squadron, succeeds Admiral Gervais on the Committee of Inspectors-General of the Navy; Vice-Admiral Humann vacates the command of the Reserve Mediterranean Squadron and assumes the command of the Active Mediterranean Fleet; while Rear-Admiral Godin succeeds to the command of the Reserve Squadron, which is for the present again to be constituted as a single division to consist of three battle-ships, three cruisers, a torpedo-boat destroyer, and two torpilleurs-de-haute-mer, a total of nine vessels, which will be in commission with reduced crews for eleven months of the year and in full commission for the remaining month during the manœuvres;

Vice-Admiral Barrera, the Maritime Prefect of Brest, hoists his flag in command of the Squadron of the North, being succeeded by Vice-Admiral Fournier, who was lately in command of the squadron of cruisers formed by order of M. Lockroy, the late Minister of Marine, to serve as a high tactical school, but now broken up.

The new first-class battle-ship "Masséna," now approaching completion at Brest, is to be the new flag-ship of the Northern Squadron. In the meantime, Vice-Admiral Barrera will hoist his flag on board the "Hoche." Rear-Admiral Godin will hoist his flag, in command of the Mediterranean Reserve Squadron, on board the "Amiral-Duperré," the other two battle-ships forming the division being the second-class battle-ship "Dévastation" and the coast defence-ship "Indomptable"; the other vessels will be the armoured first-class cruiser "Amiral-Charner" (to be replaced next year by the new first-class cruiser "D'Entrecasteaux"), the new second-class cruiser "Du Chayla," the third-class cruiser "Lalande," the torpedo-avisos "Léger" and the torpilleurs-de-haute-mer "Dragon" and "Téméraire." The coast-defence battle-ship "Terrible" was withdrawn from the Reserve Squadron of the Mediterranean and placed in the second category of the Reserve at Toulon on the 10th ult. The new first-class battle-ship "Charlemagne" was commissioned at Brest on the 10th ult., with a reduced complement for her trials. It has been found necessary to put the first-class armoured cruiser "Bruix," which broke down lately when escorting the President of the Republic to Russia, out of commission, and she has now been taken in hand by the dock-yard at Cherbourg for repairs.

The Minister of Marine has issued orders for the construction of two armoured fleet cruisers (*croiseurs cuirassés d'escadre*) at the ports of Toulon and Lorient, to be named the "Dupetit-Thouars" and the "Amiral-Gueydon" respectively. The construction of the first of these two vessels had been undertaken in conformity with the ship-building vote of the "loi de finances," where she is noted as "C 3," and the vessel was to have had a displacement of 11,270 tons; but in the supplementary credits more recently voted by Parliament the Minister of Marine proposed a revision of the list of new ships, substituting for this cruiser one of 9,500 tons, of the same type as two others also proposed in the supplementary credits. The second vessel will be one of the other two above mentioned. Entirely built of steel, these cruisers will have a displacement of 9,516 tons. Their length will be 435 feet, their beam 76 feet, and their draught of water 24 feet 6 inches, allowing them to pass through the Suez Canal. The propelling machinery will consist of three vertical triple-expansion engines, driving three propellers; steam will be provided by twenty Normand water-tube boilers, and the estimated full speed is 21 knots. They will carry ordinarily 1,000 tons of coal and oil fuel, giving a radius of action of 6,500 miles at 10 knots; but it will be possible to carry 1,600 tons, giving a radius of action of 10,000 miles. The armament will comprise four guns of 19·4-centimetre (7·6-inch), eight of 16·4-centimetre (6·3-inch), four of 10·0-centimetre (3·9-inch), sixteen 3-pounder, and six of 1-pounder, all quick-firers, with the exception of the two 19·4-centimetre guns; and there will be four submerged torpedo discharges. The two 19·4-centimetre guns will be mounted, one forward and one aft in armoured turrets, the eight 16·4-centimetre guns in armoured casemates on the broadside, four being able to fire right ahead and four right astern, while the four 10-centimetre guns will be on the superstructure, protected by shields, two firing ahead and two astern. The complement is to be 562 officers and men, and the estimated total cost of each vessel is 20,215,000 francs. The designer is M. Bertin, chief of the "Section technique des constructions navales."

The Chantiers de la Gironde have received orders to proceed with the construction of three first-class torpedo-boats, Nos. 230, 231, and 232; the same firm during the last eighteen months have constructed six torpedo-boats of the same type, Nos. 206, 207, 208, 209, 210, and 211. Their dimensions are as follows:—Length 120 feet 6 inches, beam 13 feet, mean draught 7 feet 9 inches, with a displacement



of a little over 86 tons. They will be driven by a single screw, the engines developing 1,500-I.H.P., giving a speed of 24 knots, and they will carry 10.5 tons of coal, giving a radius of action of 1,800 miles at 10 knots, and 200 miles at 24 knots. The armament will consist of one torpedo-tube in the stem and another on a central pivot abaft the funnels, with two 1-pounder Q.F. guns. The crews will consist of 2 officers and 21 men. Their cost will be 388,514 francs, and they are to be completed by the middle of next year. The money for their construction will be provided from the additional credits of 3,725,750 francs lately voted by the Chambers for new constructions; six others of the same type are to be put out to contract immediately.

The new third-class cruiser "Galilée" has been successfully continuing her trials off Rochefort, having maintained a speed of 20 knots during a full-power trial. The new second-class cruiser "Du Chayla" has completed her preliminary trials off Cherbourg. It is reported that although the engines worked well, yet the speed attained was not as high as was expected, and it is consequently proposed to change the screws.

The following changes are to be effected during the present quarter:—

*Cherbourg.*—The new second-class cruiser "Catinat" will be commissioned for her trials; the second-class cruiser "Chasseloup-Laubat," with a reduced crew, will be temporarily attached to the Squadron of the North to carry out a special series of trials; the torpedo-aviso "Lance" will be withdrawn from the Squadron of the North, and placed in the second category of the Reserve (10th inst.). The new second-class "Du Chayla," at the completion of her trials, will commission for the Mediterranean Squadron.

*Brest.*—The new first-class battle-ship "Charlemagne" will commission for her trials (15th inst.), as also the first-class cruiser "Duchesse."

*Lorient.*—The third-class cruiser "Laclocheterie" and the aviso "Manche," which have been employed on fishery-protection duties, will be placed in the second category of the Reserve.

*Rochefort.*—The new third-class cruiser "Galilée" will complete her trials and will then commission for the Mediterranean Fleet, while her sister-ship, the "Lavoisier," will commission with reduced crew for her trials.

*Toulon.*—The torpedo-aviso "Casabianca" will be withdrawn from the Active Squadron of the Mediterranean and placed in the second category of the Reserve (15th October); the third-class battle-ship "Colbert," which has been doing temporary duty as the gunnery school-ship, while the "Couronne" was receiving new boilers, will be relieved again by the latter, and return to the second category of the Reserve; the second-class battle-ship "Friedland" will be withdrawn from the Reserve Division of the Mediterranean (15th ult.), and placed in the second category of the Reserve; the torpedo-aviso "Bombe" is to be withdrawn from the Active Squadron of the Mediterranean and also placed in the second category of the Reserve; the torpedo-depôt-ship "Foudre," after the completion of her trials will be attached to the Active Mediterranean Squadron; the surveying-vessel "Chimère" will be placed in the second category of the Reserve for the winter months.

*Saigon.*—The first-class gun-boat "Comète" will be placed in the Reserve, and the "Lion" commissioned to take her place, while the aviso "Bengali" is also to be placed in the Reserve on her arrival.

The French Naval Manœuvres (*continued*):—

The manœuvres of the Squadron of the North were carried out at the same time as those in the Mediterranean. In addition to the ships composing the squadron, the "*Défenses Mobiles*" of Cherbourg, Brest, Lorient, and Rochefort also took part, and were reinforced by three mobilised torpedo-boats. The Reservists called out from the 5th to the 31st July were divided between the ships of the squadron, vessels on trial, and the torpedo-boat flotilla. The *personnel*



of the semaphore stations was also doubled. The manœuvres were divided into three distinct periods :—

*First Period*, from the 7th to 11th July.—On the 7th July the First Division of the Squadron of the North was at Brest. It consisted of the following vessels :—

First-class battle-ship—"Hoche" (flag-ship of Vice-Admiral Parrayon, Commander-in-Chief).

Coast-defence battle-ships—"Valmy," "Tréhouart," and "Jemmapes."

First-class armoured cruisers—"Dupuy-de-Lôme" and "Pothuau."

Third-class cruiser—"Surcouf."

Torpedo-cruiser—"Épervier."

Torpedo-aviso—"Lance."

Torpilleur-de-haute-mer—"Ariel," and first-class torpedo-boats Nos. "184," "131," "77," "188," "133," and "60."

The Second Division, under command of Rear-Admiral the Marquis de Courthille, was at Cherbourg, and consisted of the following ships :—

Coast-defence battle-ship—"Bouvines" (flag-ship).

First-class armoured cruiser—"Bruix."

Second-class cruiser—"Friant."

Torpedo-avisos—"Cassini" and "Salve."

Torpilleurs-de-haute-mer—"Aiglon," "Bouet-Willamez," Nos. "164," "167," "169," and some second-class.

During this first period, both at Brest and Cherbourg there were attacks on the larger ships by the torpedo-boats both by day and night. At Brest the "Hoche," "Valmy," and "Tréhouart," anchored in line, were attacked by the torpedo-flotilla, which was divided into groups; the torpedoes were fitted with collapsible heads and there were some successful hits. In the evening the whole squadron weighed and anchored at the entrance of Auberlach bay. The next day in fine weather, the torpedo-boat flotilla were employed during the day in tactics; in the evening the squadron weighed and proceeded to Roscenvall Bay, where they anchored, and were attacked between 10 p.m. and midnight by the torpedo-boats; the night being fine with a bright moon. Some of the boats were discovered by the search-lights, but others managed to get near enough to successfully discharge their torpedoes, several hits being recorded. The following evening the squadron put to sea and cruised without lights; one part represented a hostile force and the other a friendly; the torpedo-boats had to attack, distinguishing by private signals friends from foes. The next day the whole squadron returned to Brest. At Cherbourg the same exercises were carried out, but it is reported that the Brest torpedo-boat flotilla was much more skilfully handled than the Cherbourg one, no accidents occurring off Brest, while at Cherbourg there was more than one collision, the "Bouet-Willamez" badly damaging No. "164."

*Second Period*, 15th to 24th July.—The theme carried out was as follows :—The "Bouvines" represented a hostile fleet of battle-ships, having for its object the attack of either Brest or Penfret, near Glenans; the other ships of the division acting as scouts. The First Division at Brest represented the defending squadron.

The hostile fleet left Cherbourg on the morning of the 15th, but the operations were not to commence until the meridian of Vierge Island (almost the meridian of Saint-Mathieu) was reached. At that point the enemy was permitted to detach his cruisers to scout; but their speed was limited to 12 knots, while the "Bouvines" was not allowed to go more than 40 miles from the French coast or to communicate with the semaphore stations; to be victorious the hostile fleet must reach before the evening of the 16th the east of the meridian of Saint-Mathieu the entrance to Brest, or else the island of Moutons, without coming under the fire of the defending forces. Co-efficients of value had been given to the various units in such a way as to render all grouping of cruisers, inferior to the ships of the first line, of both divisions; and it was deemed that maintaining a ship for 30 minutes

under the fire of a superior unit was sufficient to place it *hors de combat* during a period of 24 hours.

Admiral Perrayon commanding the defending force, on his side, determined that the "Hoche" and the "Jemmapes" should be considered to represent the defending battle-ship squadron, and they should be allowed to steam at a speed of 8.5 knots; the "Valmy" and "Tréhouart" should be counted cruisers with a 10-knot speed, while the "Dupuy-de-Lôme" "Surcouf," "Épervier," and "Lance" should be allowed to steam at 12 knots, and all the ships were permitted to communicate with the semaphore stations. The "Valmy," "Tréhouart," "Surcouf," "Dupuy-de-Lôme," were directed to cruise on the parallel of the Créach Light-house, the "Épervier" off Fromveur, and the "Lance" off Four, while the battle-ships lay inside Saint-Mathieu. Thanks to a dense fog, the "Bouvines," having a good pilot, succeeded in bombarding Brest for four hours before being disturbed, while two of her cruisers also succeeded in cutting off and placing *hors de combat* the "Tréhouart."

The whole squadron was then concentrated at Quiberon to carry out a second theme, in which the cruisers were also destined to play the principal rôle. The idea was for the Northern Squadron to protect the coasts of Brest and Rochefort against the attack of a hostile force coming from the Mediterranean, represented by the two first-class cruisers "Tage" and "Sfax" then *en route* from Toulon to Brest; they were to cross the parallel of Cape Finisterre between 8 p.m. on the 18th July and 4 a.m. on the 21st. Leaving the meridian of Vigo, they were to steer a course to the east of the meridian of 12° West, and a direct line passing 20 miles from the coast of Spain and Ushant. Within these limits the two ships could steer any course which was most convenient to enable them to avoid the defending force and reach the coast between the island of Aix and Brest, without, however, crossing to the north of a fictitious line joining the semaphore at Saint-Mathieu to Créach. Their maximum speed was to be 10 knots, and they were to be considered successful if they remained six consecutive hours at anchor without being molested by the defending force. It was also determined that this latter should be of superior strength to the attack, but that its vedette cruisers should be inferior to those of the enemy.

The speed of the defending cruisers was limited to 15 knots, but if the enemy was sighted the "Friant" was to be despatched to inform the Admiral at a speed of 17 knots, as the Engineering Department of the Ministry of Marine were anxious to have the power of endurance of the Niclausse boilers tested. At 6 p.m. on the 19th the "Pothuau" sighted the enemy, who in the morning found themselves followed by the three hostile cruisers—"Dupuy-de-Lôme," "Friant," and "Pothuau"—and, as it was imperative to mislead these if possible, a course was shaped for Cape Rochefort, Captain Valery, in command of the defending cruisers, now despatched the "Friant" to inform the Admiral of what appeared to be the enemy's objective; but, as soon as the "Friant" was out of sight, the enemy altered his course again towards Glenans, and the "Pothuau" was sent off to announce this change in his movements. The Admiral thus informed weighed and steamed westwards at a speed of 9 knots, which was the prescribed rate for his battle-ship squadron by the Regulations, but the enemy had altered course now for the third time, and although the "Dupuy-de-Lôme" kept contact with them, they reached Belle Isle and might have remained there for the six hours, which would have given them the victory, as by herself the "Dupuy-de-Lôme" was powerless to interfere; but thinking from some signal made by the cruiser that the rest of the fleet was approaching, the hostile ships steered again towards Brest, and so ran into view of the defending fleet, and although their superior speed enabled them to reach the Bay of Bertheaume, yet a couple of hours later they were followed by the defending force, and thus lost the day. It may be mentioned that the "Friant," which has been in commission for two years and a half, completed some long-distance trials very successfully.

She ran continuously during six days and nights at 16 knots, and afterwards for 15 hours at 17 knots. Subsequent inspection showed that the boilers and machinery remained in perfect condition.

*Third Period.*—This calls for no notice, the ships and torpedo-boats being employed in the same tactical exercises as during the first period, with the addition that the larger ships had to construct boom defences to defend themselves against torpedo-boat attacks, while at anchor.—*La Marine Française, Le Yacht, and Le Temps.*

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RUSSIA.—The Russian Naval Estimates for 1898 amount to a total of 68,055,420 roubles, to which must be added a further sum of 6,000,000 roubles for increased ship-building, and a sum of 15,500,000 roubles for the extension of Vladivostok Harbour.

The chief items in the ordinary estimates are 27,304,693 roubles for ship-building and ordnance; 11,244,371 roubles for the maintenance of the ships at present afloat; 4,014,513 roubles for the construction of barracks; 4,487,556 roubles for the maintenance of arsenals and workshops; 7,421,595 roubles for the keep of sailors ashore; and 3,705,420 roubles for the construction of the Alexander III. dockyard, besides 3,000,000 roubles for the extension and improvement of Vladivostok dockyard.

The credit of nearly 4,000,000 roubles for the Alexander III. dockyard at Libau is a great increase over previous estimates, and is taken as evidence of the Government's anxiety to have the dockyard completed as soon as possible, in order that the naval base, which is at present at Cronstadt, may be transferred to a port better complying with the requirements of the Navy. As soon as the new yard is ready the greater part of the fleet will be transferred to Libau.

Torpedo-boats Nos. "129," "135," "136," "137," and "138" have been launched and are included in the Third Division. Torpedo-boat No. "133," which was built at the Neva Works, and tested last year, went out on the 3rd and 4th July for steam trials and the taking of statistics on the measured mile at 0.5, 0.7, and 0.9 of the full number of revolutions of the engines. On the 3rd, one trip was made with forced draught in order to test the state of the engines after certain parts had been replaced. The trials were successful. Torpedo-boat No. "128" from the Ijoro Works has also carried out on the measured mile her forced-draught trials.

Last year experiments in night signalling were made on board the "Admiral Ushakov," at sea at various distances. At a distance of 2 miles the number and colour of the lanterns could be distinguished with the naked eye, but at 4 miles this could only be done with a glass, and at 6 miles it was difficult to do so even then. The atmosphere was quite clear at the time. This winter fresh experiments were made with the electric signals of Colonel Tabulevich, but were soon abandoned, and the lanterns of Colonel Miklashevski were again tried. These were spread over a considerable length of time and were made under various conditions of atmosphere and wind, and were entirely satisfactory, as we learn. The force of the wind was from 5 to 6 balls according to the Bofort anemometer, and the lantern never once went out. Signals with red and green lights were made from the marine telegraph station 100 feet above the level of the sea in clear weather, during some 45 minutes, which were watched at St. Petersburg from the third storey of a house in the Galley Harbour. The distance was upwards of 25 versts, yet all the flashes were clearly distinguishable, and only one lantern had to be replaced. The flashes were like those of vivid lightning or the glare from a conflagration, and could not be confused with anything else.

On the 4th July the Technical Committee discussed the project for the raising of the sunk ironclad "Gangut," put forward by the engineers Blumenthal and Jvongkin, which consisted in pumping air into bags, placed by divers

throughout the between-decks, thus enabling the ship to be floated in a vertical position. Putting aside the question whether air could be pumped at a depth of 15 fathoms, the committee proceeded to estimate the amount of air obtained by placing such bags between the upper deck and the gun-deck. This proved to be equivalent to 50,000 cubic feet, or about 23 per cent. of the whole quantity requisite for floating the ship, viz., 215,000 cubic feet, or a raising power of 6,200 tons, estimating the loss of weight of the ship in the water at one-sixth, and taking into consideration that all the compartments are full of water. The representations of experts in diving led the committee to abandon the idea of placing the bags on the gun-deck, as only very skilful divers could do such work. The only course left was to pump sufficient air into the ship to admit of its being towed to where it could be beached, and the damage repaired. The mast is to be blown away with dynamite. The total dimensions of air required equal 203,040 cubic feet, and the centre of gravity of the quantity of water eliminated will be about 2 feet 7 inches higher than the centre of gravity of the ship. The harbour-ship "Moquchi," which is to be used for experiments in pumping air to a depth of 15 fathoms, with a view to raising the sunken ironclad as described above, has arrived at Cronstadt from Transund.

It is now determined that all the twelve torpedo-boats ordered at the Ijora works—and not two only—shall be sent to Vladivostok, six of them in company, and the others separately.

On the 1st July the new ironclad "Petropavlovsk," constructed at the New Admiralty Yard, was put in commission. Her construction was commenced on the 19th March, 1892, and she was ready for launching on 28th October, 1894. She is one of the finest vessels in the Baltic fleet, both in power and armour. The steel employed is entirely of native production, and the armour of nickel steel, 10 inches in thickness, produced at the Ijora Works. The armour is backed with larch, and the deck strengthened with pine and teak. The whole length, with the ram, is 375 feet; greatest beam, 70 feet; average draught, 25½ feet; displacement, 10,960 tons. The twin screw triple-expansion engines were made in England by the firm of Hawthorne, Leslie and Co., Newcastle-on-Tyne, their I.H.P. being 10,600 at 82 revolutions; steam is supplied from fourteen cylindrical boilers at a pressure of 125 lbs.; the estimated speed of the ship under forced draught is 17 knots. She will be armed with four 12-inch long range guns, and twelve 6-inch Q.F. guns, besides Hotchkiss and Baronovsky guns, and four torpedo ejectors. She will receive her guns at Cronstadt, owing to the shallowness of the river and maritime canal. Her trial trip will take place in September, and her engines tested, as also her 12-inch guns.

The old turret-ship "Admiral Greig," which has been selected for experiment in naphtha fuel, is to have one of its engines fitted with new force-pipes on the Svenson system, which not only consume the fuel without smoke, but economise it. They also need no steam for pulverisation, which is effected by the impact of the stream of naphtha on a specially constructed steel hook at a pressure of 100 lbs. to the square inch. Thus, by the end of the summer, there will be force-pipes of four systems on board—those of Kaufman, Daniline, Yanushevski, and Svenson. The oil is to be stored in cisterns, placed in the present coal bunkers.

On the 18th July the first-class armoured cruiser "Rossia" put out to sea to try her engines at full draught on the measured mile, a commission being on board her. The ship is 480 feet long, with 68 feet beam and a displacement of 12,130 tons; there is a 10-inch water-line belt running two-thirds the length of the ship and 6 feet deep, while the armament consists of four 8-inch, sixteen 6-inch, and six 4·7-inch Q.F. guns, with eighteen small Q.F. and machine guns. The trials lasted six hours, and under full speed of both engines ten trips were made giving an average speed of 19·74 knots with 83·5 revolutions and 141 lbs pressure of steam. There are thirty-two Belleville boilers. The maximum speed

attained was  $20\frac{1}{4}$  knots. The ship is driven by three screws, which are four-bladed, and have a diameter of 20 feet. The engines made five revolutions more than the contract number of eighty. The trials gave the following results:—Starboard and port engines, 15,697·5-I.H.P. on an average; centre engine, 2,749·7-H.P. These figures are slightly above those specified in the contract. On the 22nd July a partial trial of the torpedo-cruiser "Abrek," built at Abo by Creighton and Co., was made on the measured mile, there being a defect in a tube of one of the boilers. One trip was, however, made at full speed, the result being 20·56 knots. On the 24th, the boiler having been repaired, three trips were made, the average speed attained being 20·4 knots (the contract being 21), after which there was a four hours' trial with 0·9 of the possible number of revolutions. After two hours at from 184 to 224 revolutions and 100 lbs. pressure, an escape of fire led to the burning of six men, amongst them the assistant engineer, though not dangerously. It seems clear that the breakdown of the engine is due to the badness of the workmanship and material, so that further accidents may be expected if the proposed further trial be carried out. Further particulars as to break-down of the boiler-tubes of the torpedo-cruiser "Abrek" leave no doubt as to the badness of the material of the tubes. One third of the steel employed was English and the remainder Manesmanov's. Inspection showed that three tubes had cracked, having fissures 4 inches long. Either they were very carelessly fixed, or the method of fixing was imperfect. The firm of Creighton proposes, when replacing the tubes, to have the new ones tested by a hydraulic pressure of 45 atmospheres, two months being taken up in the process. The parts of the machinery ordered at Creighton and Company's works at Abo for the cruiser "Haidamak" (pistons, piston-rods, force-pipes, etc.) are now ready and will soon be sent to their destination. They have all been inspected by the same commissioners as the "Abrek." The same firm supplies the engines for the gun-vessel "Giliak," destined for trade protection in the Pacific. Two triple-expansion engines, with two screws and 1,000-I.H.P. will give the vessel a speed of 12 knots. Six water-tube boilers have been ordered in France. The vessel's length is 206 feet; beam, 36 feet 7 inches.

A new cruiser, christened the "Paris," is to be laid down at the Baltic Works, of the same type as the "Rossia."

The programme for ships to be commissioned in 1898 includes the "Poltava," "Petropavlovsk," "Sevastopol," "General-Admiral Apraxin," ten torpedo-boats of the "Pernov" class and two of the "Sokol" class. The first-class cruisers "Admiral Nakhimov" and "Imperator Nicolai I." and the "Bakan" are to be used for trade protection in the North.

In consequence of the rapid deterioration of the Du Temple tubes, owing to their curved shape, it has been decided to replace them on board torpedo-boats Nos. 125 ("Aspè") and 126 ("Transund") by Yarrow boilers, which have also a greater heating superficies.

It is proposed this year to build a dépôt at Cronstadt for Mazut (patent oil-fuel), as all the new torpedo-boats and ships will be fitted for the use of it; some only of the boilers of the large ships will use the fuel, pending the training of the stokers, the others still using coal. The dimensions of the dépôt will depend on the amount likely to be used. Plans are already being prepared for it. The proposed dépôt will be built of iron cisterns with a capacity of 17,000 tons. Old ships' boilers are to be used for the purpose. A steam tender of iron with all necessary gear is to be built to supply vessels with the fuel, its capacity being 1,000 tons. On board the "Admiral Greig" it is to be stored in cisterns, placed in the present coal bunkers.

The first-class armoured cruiser "Admiral Nakhimov," which is expected at Cronstadt next spring, will on its arrival be furnished with new boilers, the old being used for the storage of Mazut. The cruiser "Razboinik" will shortly be got ready for sea, as she is to replace the "Kreiser" in the Pacific next year, that ship having defects to be repaired. Her copper sheathing is to be renewed.



The trials of the Emperor's electric cutter "Pernach," when four trips were made across the harbour, gave the following results :—

First trip, with the tide, was made in 10 minutes 26 seconds, equals a speed of 6·73 knots. Second trip, against the tide, 13 minutes 41 seconds, equals 5·12 knots. Third trip, with the tide, 10 minutes 30 seconds, equals 6·67 knots. Fourth trip, against the tide, 14 minutes ·05 second, equals 5 knots.

Average speed with tide, 6·7 knots, against 5·06 knots, equals 5·88 knots.

The motor throughout the trials worked at full pressure, making from 550 to 530 revolutions, with a resistance of 193 to 200 volts, and the force of current being 61 to 64 ampères.

An Imperial Decree has been issued assigning a sum of 530,000 roubles for the building of a Government basin and dock at Revel, as at present the merchant-vessels take up a large portion of the space in the existing harbour. The space now occupied by men-of-war will thus be set free for the use of merchant-vessels.

After the wreck of the "Gangut" some papers expressed the opinion that partitions in ships, especially transversal, were of little use when they had not been tested during building by the pressure of water. In order to prove the contrary, the constructor of the "Apraxin," Skvortsov, obtained permission to test these partitions, and accordingly a few days ago, in the presence of leading experts, the said ship was filled with water to a height of 20 feet above the upper keel, as well as the engine-rooms, 500 tons of water being used. The result was satisfactory, the partitions being but slightly bent ( $\frac{1}{2}$  of a degree), while the filtration was infinitesimal. This is the first time such an experiment has been tried in any country.

Nosilov, the traveller, has arrived from the Kara Sea at Tiumen. He has made a discovery which will materially affect the relations of Siberia with Europe, having found a route by river from the Obsk Gulf to that of Kara, considerably shorter than the old, and, above all, avoiding the ice of the sea. The peninsula of Yalmal, hitherto unknown, has been explored by him.

The Karabugaz Gulf, lying on the eastern shore of the Caspian, has long excited the curiosity of the fishermen of that sea, who have supposed that the constant influx into it from the sea was prejudicial to the fishing, by carrying all kinds of fish into the gulf, where they died from the saltness of the water. This gulf, which is little smaller than the Sea of Azov, had been but scantily explored until the recent expedition. The latest information about it dated from 1847, when Lieutenant Jerebtsov went round it in the steamer "Volga," and noted on the chart the profile of the shore and the soundings taken. It was supposed that its average depth was 60 fathoms. But, as Jerebtsov was only there six days, owing to being unable to fill his boilers with the highly saline water of the Adji Daria, or Bitter Sea, as the Turcomans call it, his exploration was very superficial. The salt was half-an-inch thick in the boiler during the late expedition. The Turcomans were afraid to enter the gulf, believing there was a hole in it which swallowed the water. The Admiralty, at the instance of the Minister of Agriculture, placed at his disposal for the survey a man-of-war steamer, the "Krasnovodsk," with a draught of  $4\frac{1}{2}$  feet, and had her fitted with condensers. Colonel Shpindler was appointed to the command, and was to make meteorological and magnetic observations as well, and various scientific experts were sent with him. The vessel started on the 8th of May, and two days later soundings were taken at a depth of 30 fathoms, and specimens of water and the sea's bed taken. The gulf was not reached till the 14th, when a six-oared gig was at once sent to survey the entrance, but with no result; she grounded in one place, and the night had to be spent at anchor. However, further surveys enabled the "Krasnovodsk" to get slowly up to the bar. It was not till the 27th May that she succeeded in entering the gulf, and that only after being considerably lightened. Her first trip was through the middle of the Adji Daria to the eastern shore. It



turned out that the depth rapidly increases to a maximum of 7 fathoms, and then slowly decreases. The bottom is in parts of gyss, with green water-plants, or of Glauber's salt, which in many places forms a layer 1 foot thick. Other trips to the north, south, and south-west confirmed in the main the results obtained by the first, as well as regards temperature, density, and the nature of the bed. As regards the currents, they are but slight, and in many parts are only caused by the wind. The temperature of the water in the Adji is about 30° centigrade on the surface, and varies but little with the depth, while in the gulf it is often below 15°. Bathing is impossible, on account of the high salinity. The shores of the Adji are elevated, and covered in parts with wood, and there is scarcely any fresh water along them, so that they are uninhabitable. In the gulf, however, there is a large colony of fishermen on the south-west shore, and on the east, not far from the entrance, an *aoul*, or village, of Turcomans. There is abundance of water-fowl, red geese, and cormorants, and we saw some swans, ducks, and eagles; there were swarms of tarantula and lizards, and once we came on a small turtle. On the 20th the expedition turned homewards, and in the centre of a line drawn between Krasnovodsk and Baku, at a depth of about 400 fathoms, made some very interesting observations, and reached Baku on the 25th.—*Kronstadt'ski Věstnik* (July-August).

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## MILITARY NOTES.

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### PRINCIPAL PROMOTIONS AND APPOINTMENTS DURING SEPTEMBER, 1897.

Major-General J. May, C.B., Bengal Infantry, to be Lieut.-General. Colonels R. McG. Stewart, C.B., R.A., F. H. Marsh, Bengal Infantry, V. W. Tregear, C.B., Bengal Infantry, F. H. Berkeley, half-pay, J. G. Walker, Indian Army, and G. C. Hogg, C.B., Bombay Cavalry, to be Major-Generals. Major-General W. E. M. Gosset, C.B., to command the Dublin District. Colonel F. W. Robinson to command the 53rd Regimental District, and Colonel Sir G. A. de Hochepied-Larpet, Bart., to command the 16th Regimental District.

HOME.—The Council of the Royal United Service Institution have received with great regret the report of the death of their esteemed colleague General George Erskine, which took place on the 7th instant, suddenly, at his residence, 53, Lee Park, Blackheath, S.E., in the eighty-third year of his age.

General Erskine, who was born at Worthing, in Sussex, on the 24th February, 1815, was a son of Colonel James Erskine, C.B., who commanded the 48th Regiment from 1811 until his decease in 1826. He was educated at a private school at Brixton, at the College Royal of Caen, and at the Royal Military College, where he was admitted a Gentleman Cadet in 1830. On the 17th August, 1832, he entered the Army as ensign in the 33rd Regiment, became lieutenant on the 3rd June, 1836, captain on the 14th April, 1843, and brevet-major 20th June, 1854. He was adjutant of the *dépôt* from 1836 to 1840, and adjutant of the regiment from the 6th November, 1840, to the 13th April, 1843. He attended with the 33rd the funeral of the Duke of Wellington in 1852. In 1854 he embarked with the regiment for Malta, and subsequently for the Crimea, where he suffered severely from cholera. In spite, however, of the doctor's orders he rejoined his regiment after the battle of the Alma. He was present during the siege of Sebastopol, and commanded the piquets of the Light Division on the 14th October, 1854, when they repulsed the attack made on them by the Russians. He commanded a company of the 33rd at the battle of Inkerman, and was rewarded for his services on that occasion with a brevet lieutenant-colonelcy, dated 12th December, 1854. He also received the Crimean medal with two clasps, the 5th Class of the Medjidieh, and the Turkish medal.

He was invalided home in July, 1855, became regimental major on 24th August, 1855, and lieutenant-colonel unattached on 26th October, 1855. He commanded a dépôt battalion at Malta from 2nd November, 1855, until it was broken up on 25th October, 1856; and from 20th February, 1857, until the 21st September, 1860, commanded the 6th Battalion of the Military Train. On 12th August, 1860, he was promoted to the rank of Colonel in the Army.

On the 21st September, 1860, he was appointed Deputy-Inspector of Volunteers at the War Office, and in that capacity took a prominent part in the organisation of the Volunteer force during the most critical period of its existence. On 24th January, 1865, he succeeded General McMurdo as Inspector-General of Volunteers, an office which he held until the 31st March, 1862, with great satisfaction to successive Secretaries of State.

From 31st March, 1868, until 1st April, 1869, he was Colonel-Commandant of the Military Train at Woolwich; was Inspector of Army Clothing from the latter date until 1871; and from the 14th August, 1871, to the 30th June, 1872, held the office of Colonel on the Staff for Reserve Forces in London. He was granted a Distinguished Service Reward on 9th May, 1868, and on the 20th August, 1873, was promoted to the rank of Major-General, ante-dated to the 6th March, 1868. On the 1st July, 1872, he was appointed a Colonel on the Staff to command the South-Eastern District, Shorncliffe, and held that appointment till the 1st January, 1873, when he was appointed a Brigadier-General to command the troops in the Chatham District, where he remained until the 20th January, 1878. He was promoted to Lieutenant-General on the 1st October, 1877; and on the 1st July, 1881, retired from the Army with the honorary rank of General. On the 9th June, 1888, he was appointed to the colonelcy of the Argyll and Sutherland Highlanders, from which he was removed, on the 30th June, 1895, to his old regiment, the 33rd, now the Duke of Wellington's (West Riding) Regiment.

In 1884 General Erskine became a member of the Council of this Institution, and from the year 1886 until 1895, occupied either the Chairmanship or Vice-Chairmanship of the Council. He was intimately connected with the working of the Institution, and took a deep interest in its welfare. He displayed great skill and tact in the management of its affairs during the period of anxiety occasioned by the removal from the old quarters in Whitehall Yard to the present establishment. The Institution has benefited much by his sound advice and judgment, and the members are to a great extent indebted to him for the acquisition of the Banqueting Hall and the ground upon which the present Institution stands. The late General was a man of very high principle and honour, and held in the greatest respect by those who had the privilege of his acquaintance; and his death will be deeply regretted by all who are interested in the work which the Institution is trying to carry on.

General Erskine was buried at Charlton Cemetery on the 11th instant, his funeral being attended, on behalf of the Institution, by Vice-Admiral Sir N. Bowden-Smith, K.C.B., Chairman of the Council, and General Lord Chelmsford, G.C.B., Admiral H. Boys, Colonel Lonsdale Hale, R.E., Lieutenant G. A. Maltby, R.N., and Major R. Holden. A wreath was placed on the General's coffin on behalf of the members of the Institution, and, as a special mark of respect, the flag was flown half-mast on the day of the funeral.

Instructions have been issued from the War Office to General Officers commanding districts to submit the names of officers of Militia battalions who may be desirous of being employed as Supply and Transport officers in case of mobilisation. One officer in each battalion will be selected, and he will be required to attend a course of instruction at Aldershot of a fortnight's duration, receiving, if he passes satisfactorily, a certificate from the officer commanding Army Service Corps, Aldershot. He will further be required to attend for a

fortnight at the station at which he will be employed in the event of mobilisation, so as to obtain local knowledge. He will receive the pay and allowance of his rank for a total period of twenty-eight days. The courses commence on 1st February, 1st March, 1st October, and 1st November.

Those officers who have made inquiries as to the organisation, strength, etc., of the Egyptian Army, will find the subject fully dealt with in the Military Notes which appeared in the JOURNAL of this Institution for May, 1896, p. 647. Since then the Army has been increased to ten squadrons of cavalry; five batteries of artillery; three companies of garrison artillery; six companies of camel corps, two of which are fellahin and four Sudanese, exclusive of the Khedive's Camel Corps; twelve battalions fellahin infantry (Nos. 1 to 8, and 15 to 18); and six battalions of Sudanese (Nos. 9 to 14). The following are the new formations since January, 1896:—9th and 10th Squadrons of Cavalry, 14th to 18th Battalions of Infantry, and 4th to 5th Batteries of Artillery, with 7·5 cwt. Maxim-Nordenfeldt Q.F. guns. A Garrison Directory of the Force in Egypt, British and Egyptian, can be obtained from the Staff-Quartermaster-Sergeant, Head Quarters, Cairo, or the Staff Clerk, Head Quarters, Alexandria; price, 6 P.T., including postage.

The annual mobilisation of the Royal Artillery to man the Thames forts—viz., Coalhouse, Coalhouse Battery, Cliffe, and Shornmead—took place last month, under the direction of Major-General Sir Charles Warren, commanding the Thames District. On the 27th September No. 6 Company Eastern Division Royal Artillery, from Shoeburyness, was ordered to man Cliffe and Shornmead Forts, on the right side of the river, while No. 25 Company of the same division, from Sheerness, occupied Coalhouse Fort and Battery. The object of the operations, which lasted throughout the week, were, in the main, to test the working of the various intricate appliances which are essential for the safeguarding of the river approach to Woolwich and London. The forts, during the greater part of the year, are partially occupied by detachments of well-trained gunners, under master gunners of each fort, who keep the guns clean and in working order, and periodically test the machinery for sending up powder and ammunition from the magazines. There are, however, instruments under the charge of these master gunners which require constant attention, such as range-finders and telephones, and it is only by having these "mannings" that mistakes are adjusted and improvements made. The troops quickly settled down to the positions assigned to them, and made the best of the accommodation that was obtainable. Neither Coalhouse nor Cliffe Forts are easy of access for supplies, but the commissariat difficulty was readily overcome, and the troops obtained satisfactory rations. Drill was carried on steadily, and the men were instructed in the various methods of stopping torpedo attacks. Colonel Beaver, R.A., commanding the Militia and Volunteer Artillery of the Thames District, acted as fire commander, with Major Kelly, R.A., as his gunnery instructor, and Captain Harcastle, R.A., as his staff officer. On the night of the 27th ultimo war was supposed to have been declared, and the scheme of operations included an attempt on the part of torpedo-destroyers from Sheerness, and Government tugs, to surprise and run past the forts. The officers and men who were told off for the manning of the forts were tried very severely on the night of the 28th, keeping watch for the enemy. Reliefs were told off for the guns, and an officer and watchmen were posted on the top of all the forts to look for suspicious vessels and give the alarm to the garrisons. The electric light was started by the Royal Engineers at Cliffe Fort about seven p.m., and searched down the river for the enemy. Unfortunately, just about nine p.m., a heavy mist came over the whole river just at the moment that the officer on watch on the top of one of the forts thought that he could discern a torpedo-destroyer dashing up the river. The Royal Artillery

officers were bemoaning their luck, as the electric search-light could not pierce the denseness of the atmosphere, and all the preparations for defence seemed to have failed. However, on the morning of the 29th, it was discovered that the Navy had not attempted to face the fog. No doubt it could have been a great advantage for the invading ships if they had had the atmospherical conditions that prevailed on the night of the 28th, and had been bold enough to risk running against mines and going ashore. At daybreak on the 29th the fleet were sighted, and all the guns brought to bear, and a heavy fire was poured upon them. It was assumed that they could not possibly have lived in the hail of shot and shell. Several false alarms were made during the day through the difficulty of recognising friendly ships from foes, but no further attack was attempted before nightfall.

The operations were continued on the 1st October. The very fine modern battery at Coalhouse, which consists of four 6-inch and two 10-inch breech-loading guns, on hydro-pneumatic mountings, was tested with dust shot weighted up to the Service projectile and full charges of powder. These guns, which are loaded at a down position, are neatly brought up over the parapet by means of air and liquid pressure, and the guns are directed on to the objective from beneath the parapet. The great advantage of the method is that no men need be exposed at all. The discharge of the gun brings it down again to its loading position. The operations practically ceased on the 1st inst., and the companies prepared to return to their headquarters. The 2nd Bn. Royal Scots Fusiliers and the 2nd Bn. Royal Warwickshire Regiments appear to have had a very poor time on the night of the 27th ult., when the former were sent out from Chatham to defend the Q.F. guns placed outside Cliffe Fort, and the latter were ordered to attack them and capture the guns. The weather was terrible, raining in torrents, and the regiments must have been nearly dead-beat when they reached Chatham again. The ground around these forts is intersected by ditches, and very marshy, and is in itself sufficient to give trouble to troops at night. No news reached the forts as to what happened to the Warwickshire, but the guns remained intact. On the 30th ult. Brennan's torpedo from Cliffe was run, the spectators being convinced of the very valuable weapon that it would be in time of war in narrow waterways. This torpedo can be directed from the shore, and, with expert hands at the helm, can make nearly certain of striking and blowing up a ship every run it makes. The operations were very successful, for, although the weather was during the greater part of the time very unsatisfactory, both officers and men worked hard to carry out to the letter the working of the scheme. It proves conclusively that, in actual warfare, men told off in reliefs will have to be continually, both night and day, at the guns, and thus not miss an opportunity of getting a shot in at the enemy. It seems, also, that more training in the recognition of ships and in the means of circulating signals between the look-out stations and the forts are needed. Another requirement that has been established is that the coast artilleryman should be more in touch with the Navy, and should have early information of their doings through fast scouting vessels.

The strength of the Tirah Expeditionary Force, which, under the command of General Sir William S. A. Lockhart, K.C.B., K.C.S.I., is operating against the Afridis and Orakzais, is about 31,000, with a Reserve Brigade at Rawal Pindi of 3,200. The following is its composition :—

Main Column. *First Division*, 9,460.—Brigadier-General W. P. Symons, local rank of Major-General.

1st Brigade, Colonel J. S. M. Hamilton, temporary rank of Brigadier-General. 2nd Battalion Sherwood Foresters, 1st Battalion Devonshire Regiment, 2nd Battalion 1st Goorkha Regiment, 30th Bengal Infantry.

2nd Brigade, Brigadier-General A. Gaselee. 2nd Battalion Yorkshire Regi-

ment, 1st Battalion The Queen's, 2nd Battalion 4th Goorkha Regiment, 3rd Sikh Infantry. Divisional Troops: No. 8 Mountain Battery, R.A., No. 2 Derajat Mountain Battery, No. 1 Kohat Mountain Battery, two squadrons 18th Bengal Cavalry, 28th Bombay Infantry, Nos. 3 and 4 Companies of Bombay Sappers and Miners, Capurthala Infantry, Maler Kotla Sappers.

*Second Division*, 9,260.—Major-General Yeatman-Biggs.

1st Brigade, Colonel F. J. Kempster, temporary rank of Brigadier-General. 1st Battalion Gordon Highlanders, 1st Battalion Dorsetshire Regiment, 1st Battalion 2nd Goorkhas, 15th Bengal Infantry.

2nd Brigade, Brigadier-General R. Westmacott. 2nd Battalion King's Own Scottish Borderers, 1st Battalion Northamptonshire Regiment, 1st Battalion Goorkha Regiment, 36th Bengal Infantry.

Divisional Troops.—No. 8 Mountain Battery Royal Artillery, No. 9 Mountain Battery Royal Artillery, No. 5 Bombay Mountain Battery, Machine-Gun Detachment, two squadrons 18th Bengal Cavalry, 21st Madras Infantry, No. 4 Company Madras Sappers and Miners, Jhind Infantry, Skirmoor Sappers.

Line of Communications, 5,000.—Lieut.-General Palmer, 22nd Bengal Infantry, 2nd Battalion 2nd Goorkha Regiment, 39th Bengal Infantry, 2nd Punjab Infantry, 3rd Bengal Cavalry, Jeypore and Gwalior Transport Corps.

Peshawar Column, 4,500.—Brigadier-General A. G. Hammond. 2nd Battalion Royal Inniskilling Fusiliers, 2nd Battalion Oxfordshire Light Infantry, 9th Bengal Infantry, 45th Bengal Infantry, 57th Field Battery Royal Artillery, 3rd Mountain Battery Royal Artillery, 9th Bengal Cavalry, No. 5 Company Bengal Sappers and Miners.

Kuram Movable Column, 2,600.—Colonel W. Hill. 12th Bengal Infantry, Nabha Infantry, four guns, 3rd Field Battery R.A., 6th Bengal Cavalry, Regiment of Central India Horse.

Rawal Pindi Brigade in Reserve.—Brigadier C. R. Macgregor. 2nd Battalion Yorkshire Light Infantry, 1st Battalion Duke of Cornwall's Light Infantry, 27th Bombay Infantry, 2nd Regiment Hyderabad Continent Infantry, Jodhpur Lancers.

FRANCE.—An important decree has been issued relative to the medical officers of the Reserve and of the Territorial Army. Medical officers of the Reserve must be either retired military surgeons who seek appointments in the Reserve, or civilian medical men who have graduated as M.D. at a French faculty, and who are available for duty with the Army on active service. Retired military and naval surgeons may be appointed to the Reserve with the rank which they held when on active service. Civilian medical men can on their first joining the Reserve only hold the rank of assistant-surgeon-major (*médecin aide-major*) of the second class. Their fitness for this position is ascertained by a special examination, the subjects of which are prescribed by a Ministerial regulation; they are admitted to this examination as students when they have completed the class attendance required by the Minister of War. The regulations with respect to promotion are as follows:—Civilian medical men appointed to the Reserve cannot in time of peace rise to a higher rank than surgeon-major (*médecin-major*) of the second-class, and that only after having passed a special examination the subjects of which are sanctioned by the Minister of War and are such as to test the officer's knowledge of administrative work and of the military aspect of his duties. Ex-military surgeons can rise by promotion in the Reserve to the rank of surgeon-major of the first class. The minimum period of service necessary for rising from any rank to the step immediately above it is fixed at four years in the case of assistant-surgeon-majors of the second class, and at six years in the case of assistant-surgeon-majors of the first class or surgeon-majors of the second class. At the same time, the length of



service required for promotion to the rank of assistant surgeon-major of the first class is reduced to two years in the case of officers of the Reserve who are filling, or who have filled, the position of professor or assistant professor in the faculties of medicine; of hospital physician, surgeon, or obstetric physician in the cities where these appointments are awarded by competition; of *chef de clinique* or prosector appointed by competition in the faculties or schools of medicine; or of resident medical officer of a hospital appointed by competition in cities which possess a faculty of medicine or a combined faculty of medicine and pharmacy.

The provisioning of the troops during the manœuvres of the 1st and 2nd Army Corps was carried out on the principles which would be applied in actual warfare, if railways were available. The soldiers on leaving their garrisons carried the regulation rations. The regimental trains carried two days' bread and oats, one day's preserved meat, sugar, and coffee, to ensure distribution up to the evening of the 7th September. The regimental trains of the cavalry divisions carried only one day's bread and oats. The army corps had neither administrative trains nor field baking. Each army corps had two days' supply of meat in the herds which followed, and a park of cattle sufficient to keep the herds up to their proper strength. The departmental officers procured hay and straw on the spot, also firing, liquids, soup-bread, and, as far as possible, oats. Two station stores were established at Lille and La Fère, which furnished the troops with table-bread, sugar, coffee, and such soup-bread and oats as the departmental officers had not been able to obtain locally. The commissariat herd daily furnished the troops with the necessary quantities of meat, which was loaded on special carriages and followed immediately after the fighting train, to ensure distribution on the troops being halted. The regimental trains were divided into two echelons as prescribed by regulation. An echelon had the duty of distribution at the halting place, and was re-supplied next day by rail. The station stores, therefore, of Lille and La Fère forwarded daily a day's provisions to the regimental trains, and their provisions were addressed to the centres fixed on for unloading, these being, as a rule, unloading dépôts for the army corps, and others for the corps cavalry and divisional cavalry. The Inspector-General each day informs the unloading centres what the movements of the following day are to be, and states the hours at which the trains will arrive. He also instructs the station stores how much approximately is required at the unloading centres. The intendant of each army corps likewise telegraphs details to the station stores regarding his requirements for the next day, and if the provisions have already been sent off, any deficiency is made up by the next train which leaves the station. If an excess of provisions should have been delivered at an unloading dépôt, the regimental trains having been supplied, the sub-intendant in charge of the dépôt hires or requisitions wagons, and transports the excess provisions to the nearest cantonment, to be delivered to the echelon of the regimental train which has to be supplied on the following day. The supplies of sugar and coffee with which the men started were renewed by the commissariat trains, for the first time, on the 7th September, and a second time on the 13th. By order of the Director-General the two days' reserve rations were consumed, one during the corps manœuvres and the other during those of the army.—*Revue du Cercle Militaire*.

During the year 1897, 549 pupils passed into the Army from the senior division of St. Cyr. Of these, 468 entered the infantry as sub-lieutenants, and 71 the cavalry. There were, in addition, 2 Roumanians, a Turk, a Persian, and an Arab, and 5 cadets who had prepared for the cavalry. The two most distinguished cadets were sons respectively of General Mercier and the Ambassador to Russia. The Polytechnic School has, this year, sent out 228 pupils, of whom 200 have entered the Services.

The store of preserved provisions maintained in readiness for war, amounts to 2,000,000 kilogrammes for the Army, and 1,600,000 for the Navy. This year's



peace consumption was 850,000 kilogrammes. Until the year 1895 the price paid for preserved meat from Australia was between 1 franc 15 and 1 franc 35; but in 1896 it was determined to buy only from France and her colonies, and consequently the price rose in that year to between 2 francs and 2 francs 80.

A large range and drill-ground is being prepared for the 18th Army Corps near Bordeaux. It is situated in the communes of Mortignas and St. Medard, and extends to about 5,000 acres. The garrison of Bordeaux has long made use of this district for musketry practice, the country towards the mouth of the Gironde being wild and thinly inhabited.—*Avenir Militaire*.

The Minister of War has issued regulations for the practical musketry instruction of officers at the school of musketry in the Camp of Châlons. The objects are to establish a universal standard of infantry shooting, and ascertain the causes by which it is influenced; to decide upon a uniform and workable method of preparing troops for, and putting them through, their musketry course; and to make the officers in attendance acquainted with the progress of armament in France and abroad. The officers are also to collect information as the best means of making musketry fire effective, and on the formations best calculated to minimise loss. In the present year two courses will take place, lasting from ten to thirteen days. Forty-five superior officers will be present, namely, ten colonels or lieutenant-colonels, and thirty-five majors.—*Spectateur Militaire*.

The system of providing free Arab and French chargers for infantry captains has undergone some change. It has been found that the smaller light cavalry horses hitherto supplied, when taken from their regiments at six years old, have been insufficiently broken, and require to be sent back to have their training completed. If they do not prove well fitted for their purpose they have to be sold at a loss. In future, therefore, light cavalry horses from six to eight years old will be available for infantry captains; also horses from ten to thirteen years old, which are less fit for cavalry work. Horses taken from regiments in this way will have their places filled by remounts.—*Bulletin Officiel du Ministère de la Guerre*.

During the present month, a tunnel at which the engineer troops have been working for the last five years, should be completed. It runs under the Col de Paupailan, and is 464 metres in length. It serves to connect the forts of Fournoux with Embrun. The engineers have been assisted by civilian workmen.—*Le Progrès Militaire*.

GERMANY.—On the subject of infantry fire, there is the danger that, in training men to seek protection, they are being trained to hide themselves, and that the military spirit of the offensive is apt to be destroyed. It is the right and duty of the officer to take account of losses, and to diminish them as much as possible, by utilising the ground. But he must never be dominated by the fear of loss to the forgetting of the great fruits of success. Undoubtedly the training in the use of ground should be wholly eliminated from the education of the soldier, in so far as it relates to his personal security during the attack, or, as the regulations say, for the attenuation of the effect of the enemy's fire. Changes in armament have not changed human nature, and there can be little doubt but that men will be only too willing to seek protection for themselves, without being specially trained in the art of finding it. It is for the leader to decide if the conformation of the ground is favourable and admits hope of success, but, when the order to advance has been given, the man has no right to think of whether he shall go forward or not, or whether he shall find protection or not; above all things, he must go forward. We do not oppose the spirit of the German regulations, and would not habituate troops to despise the protective

value of the ground they pass over, but it must be taught to them not as individuals, but as troops in the field, always under the order of their officers as to whether they shall seek its protection or not. "Let us expel from our ranks this cult of protection and fear of loss; they can only have destructive influence upon the boldness of the troops and the spirit of the offensive in them."—*Militär-Wochenblatt*.

During this year's German manœuvres there were, as usual, various military arrangements and inventions which, in order to prove their value, were put to practical tests. One of these novelties was the optic telegraph. The introduction of this into the service of the field army is something new to us (in Austria), although optic telegraphy by means of flags, reflectors, and so forth, has long been in use by the foot artillery, the technical troops, and the Navy. This branch of telegraphy was in charge of men from the 1st Railway Regiment, who had been specially instructed for the purpose, but such is, in reality, not the duty of railway troops, and to employ them thus cannot but be regarded as a make-shift. Special telegraph troops are necessary. Moreover, it is impossible to count upon great results from the optic telegraph, which is useless in unfavourable weather, or where the configuration of the land is unsuitable. It is also most difficult and tedious as compared with the wire, particularly when the messages should be repeated. The optic telegraph is more troublesome than the telephone, and has the same disadvantage that it furnishes no proof of its messages having been correctly transmitted. With the land forces it will never be able to take the place of the electric wire, but in the Navy it will be a decided assistance in the communication of intelligence.—*Militär-Zeitung*.

ITALY.—The following extracts are taken from the instructions issued with regard to the recent manœuvres. The 3rd Corps, commanded by General Mirri, will consist of two divisions of infantry, supplementary troops, and a division of cavalry. The 5th Corps, commanded by General Tournon, will consist of three divisions of infantry, of which one will be mobilised Militia, in addition to supplementary troops. Each infantry division of the permanent Army will comprise 4 regiments of infantry of the line, 4 batteries of 9-centimetre guns, and 1 company of sappers, with park and a pontoon section, in addition to the accessory services (a divisional park of artillery, a telegraph company, sanitary and subsistence sections, etc.). The mobilised Militia division will comprise 4 infantry regiments, 2 battalions of Bersaglieri, and 2 batteries of artillery. The cavalry division will include 4 regiments of cavalry and 2 batteries of horse artillery. The supplementary troops of each army corps will consist of a regiment of Bersaglieri, a regiment of cavalry, and 8 batteries of field artillery. The military hospital of Milan and the Italian Red Cross will each supply a field hospital of fifty beds. A detachment of cyclists from the 48th Regiment of Infantry will be attached to the cavalry division for practical trial in the field. Twelve new movable field ovens will be tried by the 5th Corps.

There are at present only two military colleges in Italy, situated respectively at Rome and Naples. Their object is to prepare youths for the military schools, but their usefulness has often been called in question, and it has even been suggested that they should be abolished. In the scholastic year 1897-8, the military college of Rome will receive 40 pupils of the first year, 40 of the second, and 40 of the third. That of Naples will admit 40 of the first year, 40 of the second, and 25 of the third. For the first course, the age of the pupils must have been over 13 and under 16 on the 1st August, 1897; over 14 and under 17 for the second course, and over 15 and under 18 for the third. Admission to the first and second courses is exclusively by competition. For the third there need be no examination of candidates who hold the second and third years' certificates from the Technical Institute.

The War Minister has published instructions as to the calling out, for twenty days' of soldiers of the 1st category, born in 1867, and attached to the Alpine contingents of the mobilised Militia; also of soldiers of the same category, born in 1861, and attached to Alpine units of the Territorial Militia. The date fixed for the men was the 1st October. The following have been exempted: officers residing abroad or sick during the training period, or undergoing examination for employment, or employed on commissions under Government. Men are exempted who reside abroad, provided that, if they belong to the mobilised Militia, their absence has been authorised, also those who can prove that they have gone through the national target practice during two years, those who are sick, those who have lost wife, father, or mother within two months of the date of assembly, those who have to undergo examinations which cannot be postponed, and those whose services are absolutely necessary for the support of their families. Seven companies of the mobilised Militia are to be respectively attached to seven battalions of the Regular Army, and seven companies of the Territorial Militia are to be treated in the same way.—*Revue du Cercle Militaire*.

The War Minister has directed that candidates for the position of reserve officer, who have attained the highest educational standard, are to be experimentally arranged in a class with an abridged curriculum of six instead of nine months. For infantry, the certificate of a lyceum or technical institute is sufficient to obtain entrance into this class. For artillery, there must have been attendance at a university or technical high school, for the study of mathematics, engineering, or architecture, or the certificate of the physics and mathematics section of a technical institute. Engineer officers must have the diploma of bachelor of engineering and architecture. In this class, which assembles on the 1st November, the students, if they work satisfactorily, will be made corporals in three months and sergeants in six. The infantry candidates will serve with their arm during the autumn manœuvres, and afterward get ready for examination. The artillery and engineers will remain three months longer in the class to receive instruction in their special subjects. All the students of this class finish their course in six months' shorter time than those attending the ordinary classes for military instruction.—*L'Italia Militare*.

RUSSIA.—After the departure of the German Emperor from Krassnoe Selo on the 11th August, arrangements were made for the firing of the artillery and infantry under service conditions. The method pursued was that which was tried last summer, with the object of testing not only the shooting, but the practical training of the troops. The artillery which had been detailed for practice, together with cavalry and infantry, forming one detachment, was confronted not by a marked enemy, but by troops in full strength, so that at the beginning, realistic operations were ensured. The attacking force consisted of 3 battalions at war strength, 2 squadrons, 40 guns of the foot artillery, 6 horse artillery guns, and 6 mortars. The defending detachment was composed of 1 battalion, 1 squadron, and 8 guns, but expected reinforcements. The positions of both forces were marked by flags, and the infantry commanded by the guns was represented by dummies. When the firing trials took place the defenders changed their position. The attackers had all their batteries in a preparatory position, an infantry battalion on the right wing, and another on the left, the third battalion being in reserve in rear of the left wing. The defenders were represented by dummies: on the right wing a battery; on its left, riflemen in shelter trenches; next, 2 batteries and a redoubt held by infantry, then 2 more batteries and extended infantry on the extreme left. In front of the main position there were figures showing their heads out of shelter trenches. Dummies of a new pattern were employed, being the invention of the director of the officers' school of

musketry. They resemble soldiers in shape, outline, and in the colour of their uniform. On a given signal the batteries galloped from the preparatory to the fighting position, and at once opened fire at a range of 3,600 to 4,000 paces, chiefly on the enemy's batteries. The horse battery employed case against the enemy's cavalry, and the mortar battery fired exclusively against the redoubt. Under cover of this fire the infantry advanced to the attack and drove in the enemy, preparatory to the storm, which was next ordered. The results of the firing were very good, and could be seen by all the troops present. It is thought that in future the efficiency of the artillery will always be tested in this way. In the camp of Krassnoe Selo the practice originated of instructing selected soldiers of the cavalry and infantry in artillery duties. This practice is extending, and has the effect not only of increasing artillery efficiency, but of giving men of different arms an intelligent interest in one another's duties. During the summer of this year there were also assembled at Clementieff—7 field batteries, 2 reserve artillery brigades, 1 mortar regiment, and 2 horse batteries; and, for a second period, nearly 150 guns were present, all manœuvring under the same idea of combined tactics and shooting.—*Militär-Wochenblatt*.

The question whether the land of the Cossacks belongs to themselves or to the Emperor of Russia has been under discussion in the Ural. They have long been in possession of their land, which they hold under certain conditions; and they have a common fund for military purposes, which comes under the control of the military authorities. The law of March, 1871, states that "The land of the Ural remains, as in the past, and for an unlimited time, at the disposal of the Cossacks." It therefore appears that the Cossacks are not exactly proprietors of their land, but guaranteed and privileged occupiers. This is borne out by the terms in which they are addressed by the Imperial officials, and by the facts that they have not the right to sell their lands, nor to let them for a longer term than three years.—*Revue du Cercle Militaire*.

SPAIN.—The credits granted for the year 1897-8, with the object of restoring or completing the fortifications of Spain, its adjacent islands, and North African possessions, amount to two-and-a-half million pesetas (a peseta being equal to a franc). To Cadiz, 105,000 is the amount apportioned; to the camp at Gibraltar, 60,000; to Carthage, 331,000; to Barcelona, 125,000; to Ferrol, 250,000; to Palma in Majorca, 225,000; to Mahon, 360,000; to Teneriffe, 109,000; to Las Palmas, 385,000; to Ceuta, 450,000; to Melilla, 100,000.—*Revue du Cercle Militaire*.

## NAVAL AND MILITARY CALENDAR.

SEPTEMBER, 1897.

- 1st (W). Bash-Khel, in the Kurram Valley, unsuccessfully attacked by 3,000 Afridis.
- 3rd (F). Indian Government decided to adopt punitive measures against the Afridis, Orakzais, and Mohmands.
- " " Unsuccessful attack, lasting 30 hours, on Fort Cavagnari, in the Samana Range, by frontier tribesmen.
- " " Third-class cruiser "Racoon" paid off at Sheerness.
- 4th (Sat). Conclusion of tactical operations in Sussex.
- " " H.M.S. "Renown" left Portsmouth for Halifax.
- 7th (T). Publication in *London Gazette* of the despatches regarding the attack by the Mada Khels on the Political Officer's escort at Maizar, on 10th June.
- " " Ottoman Gendarmerie in Crete placed under command of officers of the European Gendarmerie.
- " " Dervishes reported to have evacuated Berber and retired on Metamneh.
- 10th (F). Commencement of Grand Manœuvres of Italian Army.
- " " Hawaii Senate unanimously ratified Treaty of Annexation to the United States.
- 11th (Sat). Major-General Yeatman-Biggs' rear-guard unsuccessfully attacked, near Shahukhel, by Afridis and Orakzais.
- 12th (S). Berber occupied by Egyptian force under Major-General Hunter.
- " " Saragari post attacked and captured by 1,000 Orakzais; after a gallant defence by 21 men of the 36th Sikhs, all of whom were killed.
- 14th (T). Launch of the German first-class battle-ship "Kaiser Wilhelm II." from the Vulcan Yard at Stettin.
- 15th (W). Conclusion of Austro-Hungarian manœuvres.
- " " Launch from the Vulcan Yard at Stettin of the second-class cruiser "Hai Jung" for the Chinese Navy.
- 17th (F). 2nd Bn. East Lancashire Regiment left Southampton for Bombay in the transport "Nubia."
- 18th (Sat). Preliminaries of Peace signed between Turkey and Greece.
- 19th (S). General Jeffrey's brigade attacked the village of Yagaderai.
- " " Camp of 3rd Brigade at Nawagai attacked by the Hadda Mullah.
- 20th (M). Attack on Sir Bindon Blood's camp, near Lakarai, by the Hadda Mullah.
- " " General Jeffrey's brigade attacked the village of Zazai, Mahmud Valley.
- 21st (T). Conclusion of Italian Army manœuvres.
- " " "Rodney" and "Edinburgh" paid off at Chatham.
- 22nd (W). German torpedo-boat No. "26 S." capsized in heavy sea off Cuxhaven, with the loss of her commander, H.H. Duke Frederic William of Mecklenburg, and five of her crew.
- " " First-class battle-ship "Rodney" commissioned at Chatham as First Reserve ship at Queensferry.

- 22nd (W). H.M.S. "Crescent" arrived at Portsmouth from Halifax.
- 23rd (Th). Osman Digma's force crossed the Albara, retiring on Omdurman.
- " " 2nd Bn. Rifle Brigade embarked at Woolwich on the transport "Avoca" for Malta.
- " " Capture of the Bedmanai Pass by General Elles' force.
- 25th (Sat). Hadda Mullah's village of Jarobi destroyed by General Westmacott.
- " " Launch of first-class armoured cruiser "Fürst Bismarck" at Kiel for German Navy.
- 27th (M). New South Wales Lancers volunteer for service in the Indian frontier war.
- " " Launch of armoured cruiser "Garibaldi" from the Ansaldo Yard, Sestri Ponente at Genoa for Italian Navy.
- 29th (W). 1st Bn. Grenadier Guards left Southampton for Gibraltar in the transport "Simla."
- " " Launch of the first-class battle-ship "Emanuele Filiberto" at Castellamare for Italian Navy.
- 30th (Th). Third-class cruiser "Pearl" commissioned at Devonport for North-American Station.



## FOREIGN PERIODICALS.

## NAVAL.

ARGENTINE REPUBLIC.—*Boletín del Centro Naval*. Buenos Aires: August and September, 1897.—Has not yet been received.

AUSTRIA-HUNGARY.—*Mittheilungen aus dem Gebiete des Seewesens*. No. 10. Pola and Vienna: October, 1897.—“Observations on the Turco-Greek War.” “The Progress in Photogrammatry.” “The Semi-Circular Deviation, with Regard to the Separation of the Vertical Induced Ship-Magnetism from the Sub-Permanent.” “The Institution of Naval Architects, 1897.” “The Italian Naval Budget for the Administrative Year 1897-8.” “Launch of H.I.M. Cruiser ‘Zenta.’”

FRANCE.—*Revue Maritime*. Paris: August, 1897.—“Statistics of Shipwrecks for the Year 1894” (*concluded*). “Rear-Admiral Magon” (*concluded*). “Aerial Currents, their Course and their Use for Balloonists” (*concluded*). “Naval Policy.” “Naval Policy and German Strategy.” “The Trials of the ‘Powerful’ and Terrible.” “The Maritime Navigation of Japan.” “The Maritime Fisheries.”

*Le Yacht*. Paris: 4th September, 1897.—“Admiral Colomb on the Future of the Torpedo.” “Yachting Notes.” “The new Chilian Torpilleur-de-hautemer ‘Ingeniero Hyatt.’” “The Russian battle-ship ‘Sissoi-Velikie.’” 11th September.—“The Reforms in the Administration of the Navy.” “Yachting Notes.” “The Portuguese cruiser ‘Adamastor.’” 18th September.—“The Question of Boilers.” “Yachting Notes.” 25th September.—“The Results of the Competition for the Best Design for Submarine-Boats.” “Yachting Notes.” “The Competitors for the French Cup.” “Steam Pilot-Boats in the United States.”

*Le Moniteur de la Flotte*. Paris: 4th September 1897.—“Private Ship-building Yards for Naval Constructions.” “M. Félix Faure in Russia.” “The New Cruisers.” “Duties of the Major-Generals of the Navy.” “New Measured-Mile Base.” “Colonial Notes.” 11th September.—“Cornic-Duchêne,” “Submarine Torpedo-boats.” “Subvention to Naval Societies.” “Colonial Notes.” 18th September.—“The Naval Education of the Country.” “Submarine Torpedo-boats.” “The French in Siam.” “The Fisheries and Ostriculture.” “Colonial Notes.” 25th September.—“The Derelicts.” “Guns and Battle-ships.” “Colonial Notes.”

*La Marine Française*. Paris: 15th September, 1897.—“More about the Personnel of the English Navy.” “The Author of the Manœuvres of the Squadron of the North.” “The Future of the Torpedo.” “The Case of the ‘Bruix’ and Naval Engineering.” “The Navy and Public Opinion.” “The Extra-Parliamentary Enquiry into the Navy.”

GERMANY.—*Marine Rundschau*. Berlin: October, 1897.—“The Earlier History of the Fleet” (*continued*). “The Compilation of the Cost of Keeping Ships in Commission.” “Electric Telegraphy without Wires.” “Arrangement for Cable Laying at High Speed.” “Experiments by the Schichau Firm with the Water-tube Boilers of the ‘Bayern.’” “Fire-Helmets for Seamen.” “New Description of Rudder, Rudder-post, and Screw.” “Photography under Water.”

ITALY.—*Rivista Marittima*. Rome: August-September, 1897.—“Manning the Navy.” “The Defence of the Coast.” “Model Experiments Compared with Trials at Sea.” “Photographic Apparatus (1897 model) for Rapid Survey at 70000 and 100000 scale for Military and Exploring Purposes.” Letters to the Editor:—“On the Application of Electricity on board Ships.” “Literature and Naval Development.” “Naval Notes.” “Notices of Books.”

*L'Osservatore Navale*. Palermo.—Has not been received.

RUSSIA.—*Morskói Sbornik*. St. Petersburg: June, 1897.—“Reflections on Naval Tactics.” “The Organisation of Our Future Fleet.” “Development of the Fleets of the Chief Naval Powers in 1896-7.” “Why it is Disadvantageous for Russian Merchant-Ships to sail under the Russian Flag.” “The Electromotors of Petrov and Makarov,” etc.

SPAIN.—*Revista General de Marina*. Madrid: September, 1897.—“The Electric Installations on board the Battle-ship ‘Carlos V.’” “The Building Yards and Engine Works at Clyde-bank” (*continued*). “The Boilers of the English Torpedo Gun-boat ‘Spanker.’” “Geographical-Medical-Social Study of the Island of Balabac” (*continued*). “Notes on Water-tube Boilers.” “Mr. Hudson Maxim's System of Aerial Torpedoes.” “The Importance of the Engines of Ships-of-War.” “Protection of Ships-of-War.” “Destroyers.” “Alaska.” “Squadron of Operations in Cuba” (*continued*). “Conclusion of Vocabulary of Powders and Explosives.”

### MILITARY.

AUSTRIA-HUNGARY.—*Militär-Zeitung*. Vienna: 7th September, 1897.—“Hands Off.” “Distinguished Imperial Commanders of the 17th and 18th Centuries.” “French Infantry Scouts.” 15th September.—“For Pensioners.” “Distinguished Imperial Commanders of the 17th and 18th Centuries” (*continued*). “On the Russian Summer Camps.” 23rd September.—“School and Army.” “The Jubilee of three Admirals.” “The Imperial Manœuvres at Totis.”

*Mittheilungen über Gegenstände des Artillerie- und Genie-Wesens*. Vienna: September, 1897.—“Determining the Position of Objects within the Range of Fortresses.” “An Attempt to Introduce a National Gun Carriage Arrangement.” “Firing on Captive Balloons.”

*Organ der Militär-wissenschaftlichen Vereine*. Vienna: August, 1897.—“The Suppression of the Rising in Naples and Piedmont in the year 1821.” “The Trade and Traffic of the Mediterranean in the Coming War.”

FRANCE.—*Revue du Cercle Militaire*. Paris: 4th September 1897.—“Rectification of the Map of Africa.” “Study on the Expedition to Madagascar” (*continued*). “Urgent Reforms in the Infantry” (*continued*). 11th September.—“The International Naval and Military Exhibition of 1900.” “Study on the Expedition to Madagascar.” “Urgent Reforms in the Infantry” (*concluded*). 18th September.—“The International Naval and Military Exhibition of 1900.” “Military Cycling in Russia.” “The War Formation of the Italian Customs Officials.” “Study on the Expedition to Madagascar in 1895” (*continued*). 25th September.—“The International Naval and Military Exhibition of 1900” (*continued*). “The Combat.” “Study on the Expedition to Madagascar” (*concluded*).

*Journal des Sciences Militaires*. Paris: September, 1897.—“The Danger of Militias” (*continued*). “Instructions to the 2nd Cavalry Division” (*continued*). “Land, Men, and Arms in War.” “Studies on the Campaign of 1796-97 in Italy” (*concluded*).

*Revue de Cavalerie*. Paris: September, 1897.—Has not yet been received.

*Revue d'Artillerie.* Paris: September, 1897.—“German Opinions on Various Questions regarding the Constitution of Quick-firing Artillery.” “The Breech-loading Musket of 1814.” “Detailed Information on different Systems of Quick-firing Field Artillery.” “English Coast Artillery” (*concluded*).

*Le Spectateur Militaire.* Paris: September, 1897.—“The Errors of Rejuvenation.” “The War on the Congo.” “The Russian Alliance.” “The 17th Corps at Loigny.”

*Revue Militaire de l'Étranger.* Paris: September, 1897.—“The Turco-Greek War of 1897” (*continued*). “The Re-organisation of the Italian Army.” “The New Regulations for Field Service in the Austro-Hungarian Army.”

*Revue du Genie Militaire.* Paris: September, 1897.—“Telephotography.” “Analysis and Extracts of Vauban.” “Machines and Methods of Escalade.”

GERMANY.—*Militär-Wochenblatt.* Berlin: 1st September, 1897.—“The French Regulations for Artillery Field Service.” “Reviews before His Majesty the German Emperor at the Camp of Krassnoe Selo.” 4th September.—“Count della Rocca, Royal Italian Field-Marshal.” “The French Regulations for Artillery Field Service” (*concluded*). 8th September.—“Is there to be a Change in the Strength of the Battery or in the Firing Regulations?” “Our Field Sanitation.” “The Russian Summer Camps.” “This Year's English Naval Manœuvres.” 11th September.—“Survey of the Events of the War in Thessaly.” “Is there to be a Change in the Strength of the Battery or in the Firing Regulations?” (*concluded*). 12th September.—“The Grand Manœuvres in Italy.” “Regulations for French Officers on Leave.” 15th September.—“Survey of the Events of the War in Thessaly” (*continued*). 18th September.—“The Grand-ducal Hessian Division in the War of 1866.” “Survey of the Events of the War in Thessaly” (*continued*). 22nd September.—“Critical Citations.” “Extracts from the Letters of General von Goeben, 1870-71.” “Survey of the Events of the War in Thessaly” (*continued*). “The Training of Horses for War.” 25th September.—“Letter from His Royal Highness the Prince Regent Luitpold of Bavaria to the War Minister Baron von Asch.” “Moltke's Military Correspondence, 1870-71.” “The French Army of the North in the Years 1870-71.” 29th September.—“Arch-Duke Charles of Austria.” “The French Army of the North in the Years 1870-71” (*continued*). “Working Duty in the French Army.”

*Deutsche Heeres-Zeitung.* Berlin: 1st September, 1897.—“Arch-Duke Charles of Austria as Leader and Army Organiser” (*concluded*). “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 4th September.—“The Lineal Dams of English Thoroughbreds.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). “Experiments with Smokeless Leaflet Powder.” 8th September.—“Initiative Spirit in the Army.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 11th September.—“The Bruce-Lowe System of Reckoning.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 15th September.—“Remounts and Government Studs in France.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 18th September.—“Ten Years Ago.” “The First-class Ironclad ‘Ersatz Frederick the Great.’” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 22nd September.—“Statistics and Psyche.” “Experiments at Constantinople with Smokeless Leaflet Powder.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 25th September.—“The Action of Small-bore Rifles.” “A Glance Back at the Hanoverian Campaign of 1866” (*continued*). 29th September.—“The Mauser Automatic Loader in Africa.” “A Glance Back at the Hanoverian Campaign of 1866” (*concluded*). “The Army Re-organisation Regulations in Italy.”

*Jahrbücher für die deutsche Armee und Marine.* Berlin: September, 1897.—“The Hohenzollerns as Makers and Teachers of the Army” (*continued*). “A

Glance Backwards at May-Day, 1849, in Dresden" (*concluded*). "On Outpost and Intelligence Duty in the Russian Army." "The Russian Frontier Guards, and their Value in War."

*Internationale Revue über die gesammten Armeen und Flotten.* Dresden: September, 1897.—"The Disclosures of General Lebrun regarding the French Plan of Campaign in 1870." "Lines of Operation in the Event of a War between the Franco-Russian Allies and the Triple Alliance." "The Navies of the Great Powers." "The Italian Army after the Pelloux Regulations." "The English Naval Manœuvres of 1897." "Amalgamation of the French Artillery and Engineers." "The New Russian Infantry Exercise." "The Transport of Military Wagons by Sledge in Winter Manœuvres."

*Neue Militärische Blätter.* Berlin: September, 1897.—Has not yet been received.

ITALY.—*Rivista di Artiglieria e Genio.* Rome: September, 1897.—"On the Exact Determination of the Elastic Area and Equations of Stability for Elastic Bodies of Uniform Thickness." "Observations on Position Scouting for Campaigning Batteries." "The Restoration Works of the Maremma Railway on the Fiora River." "The Employment of the Kite in some Military Operations." "Memoir of the Earthquake at Spoleto in May, 1895." Miscellaneous:—"With a Maxim Gun on the Niger." "German Instructions for Destruction by Explosives." "Mountaineering and Campaigning Quick-firing Guns." "An Economic Type of Floor and Arch of Iron and Brickwork." "Artillery Notes, Home and Foreign." "Notices of Books, etc."

*Rivista Militare Italiana.* Rome: 1st September, 1897.—"Between the Chiese and the Adige." "Army Scouts." "Inoculation of Horses for Pleuropneumonia" (*continued*). "Employment of Sappers in the Field" (*continued*). "General Della Rocca." 16th September.—"The Disciplinary Council and the Fourth Session of the Council of State." "Army Scouts" (*continued*). "Analytical-Comparative Study of the Military Power of China and Japan and the War of 1894-95" (*continued*). "The Turkish Army." "The Russian Regulations for Night Marches and Night Attacks."

RUSSIA.—*Voïennii Sbornik.* St. Petersburg: September, 1897.—"A Contribution to the History of the Kokan Expedition." "Questions of Strategy" (*continued*). "The Turkish Campaign of 1877-78" (*continued*). "The Individual Instruction of the Soldier and his Horse in the Cavalry." "The Working Union of Engineers and Infantry in Battle or Manœuvres."

SPAIN.—*Memorial de Ingenieros del Ejército.* Madrid: September, 1897.—"Some Remarks on the Suggested New Artillery Barracks at Burgos" (*concluded*). "Increase of the Naval and Military Forces of Japan." "Optical Communication between Pinar del Rio and Coloma." "On the Uses of Acetylene." "New Form of Apparatus for Measuring Distances."

*Revista Técnica de Infanteria y Caballeria.* Madrid: 1st September, 1897.—"Method of Military Gymnastic Instruction for Recruits." "Cuba: the Territory of Las Villas." "Japan." "Military Writers on the War in Cuba." "Manual of Equitation." "Data for the Military History of Cuba." 15th September.—"Convoys from Manzanillo to Bayamo." "Battle of the Imus." "Cuba: the Territory of Las Villas" (*continued*). "Data for the Military History of Cuba."

SWITZERLAND.—*Revue Militaire Suisse.* Lausanne: September, 1897.—"The Fire Tactics of Infantry since 1793." "The Cavalry Remount in Switzerland." "A Suggestion for the Redistribution of the Wagons of an Army Corps." "Motors as used for Military Transport."

## NOTICES OF BOOKS.

*Militärische Schriften weiland Kaiser Wilhelms des Grossen Majestät. Auf Befehl seiner Majestät des Kaisers und Königs herausgegeben vom königlich preussischen Kriegsministerium. (Military Writings of his late Majesty William the Great. Published by the Royal Prussian Ministry of War by order of His Majesty the Emperor and King.)* Two volumes, 8vo. Berlin: Mittler, 1897.

No trait in the character of the German Emperor appeals more to general sympathy than his reverence for the pious memory of the more distinguished among his ancestors—the Great Elector, Frederick the Great, and the Emperor William I. It is not hard to understand that the Prussian King, during whose reign the greater part of Germany was united into a Federal State in which Prussia obtained a predominant position, should seem to his grandson entitled to the epithet “the Great.” Nor is it other than a service to history that a full record should be made and published of the special professional work of the soldier-king. William I. was sixty years old when the illness of his brother called him to the regency. For most of these sixty years, at any rate from 1814 to 1857, the Prince had devoted himself to the Army, in which he was early given the high rank to which his birth entitled him. The two stately volumes just published by the Prussian Ministry of War by the Emperor’s command, are a collection of the military papers written by the first German Emperor between 1821, when the Prince was a major-general and commanded a division of the Guards, to 1865, when, as King of Prussia, he superintended the completion of the re-organisation of the Army. The papers are accompanied by introductions and notes prepared at the Ministry of War, and by a great number of official and semi-official documents, which serve to illustrate and explain them. All the papers are concerned with Service questions; they have an interest only for soldiers, and as they deal with details and principles of the Prussian Service during a period which has passed away, they have chiefly an antiquarian rather than a practical value. The nature of the two volumes can best be explained to the English reader by a comparison. They are just what would be produced in England if in memory of a Prince who had been closely connected with the Army a series of extracts from blue-books were compiled, giving all that he had contributed to them, together with so much of the context as was needed to make the contributions intelligible. By far the most interesting and valuable portion of the work is contained in the last two hundred pages of the second volume, which give a history of the re-organisation of the Prussian Army in the period 1857-65. These pages will be very useful to those who care to trace in detail the origin and development of a great administrative reform. A short summary, prepared in the Ministry of War, reviews the whole discussion, and introduces the documents, which consist of the essays in which Colonel von Clausewitz, General von Roon, General von Bonin, and others, sketched from time to time the principles which they thought should govern the re-organisation, and worked out their respective schemes. King William seems to have written very little on the subject beyond an occasional short memorandum, and the notes of a most interesting address, in which he explained his views to the Ministry in December, 1859. The publication of these papers fills up a gap in the history of the Prussian Army. It is particularly interesting to note that King William the First’s very strong dislike to a two years’ term of service with the colours was by no means shared by all his military advisers. The foundation of his opinion on this subject was contained in a series of papers from the years 1832 to 1837, published in the first volume; and it is clear that he was influenced chiefly by the fear that troops of two years’ service might perhaps not prove trustworthy for the suppression of a popular movement. The following passage (vol. i., p. 154) seems to contain the substance of his idea:—“The tendency of the Revolutionary or Liberal Party in Europe is



by degrees to pull down all the props which guarantee the power and authority of the sovereign, and his security in moments of danger. It is natural that the Armies are still the chief among those props; the more they are possessed by the true military spirit, the harder it is to get at them. But discipline and blind obedience are things that cannot be created and maintained except by long habit; they therefore involve a longer period of service if, in moments of danger, the monarch is to be able to count with certainty on his troops. But it is just this blind obedience which is the most disagreeable hindrance in the way of revolutionaries. They cannot directly oppose this spirit; and, therefore, we have seen, in all States where constitution and chambers exist, which way was chosen by that party in order to attain their end, the undermining of the military spirit. . . . They managed everywhere not merely to diminish the number of soldiers kept, but also to introduce a period of service so short that there could be no thought of preserving or creating a military spirit. By this proceeding, in all Constitutional States, the military class has been undermined, as recent experience proves. If, then, we are now to impose upon our Army a period of service of two years only, I am afraid we shall produce a class of warriors far removed from being tried and trustworthy in the moment of danger. We shall no doubt have a mass of drilled and trained men, but not an Army inspired by a soldierly spirit. Who knows what future we shall in that way prepare for ourselves?"

*Notes on Military Law, Organisation, and Interior Economy.* By Captain C. G. MORRISON, 5th Dragoon Guards.

This book was adopted as a text-book at the Royal Military College about two years ago. Having been thoroughly tested there, and carefully revised to June, 1897, it has now been reprinted. It is a War Office publication, though not issued "by authority."

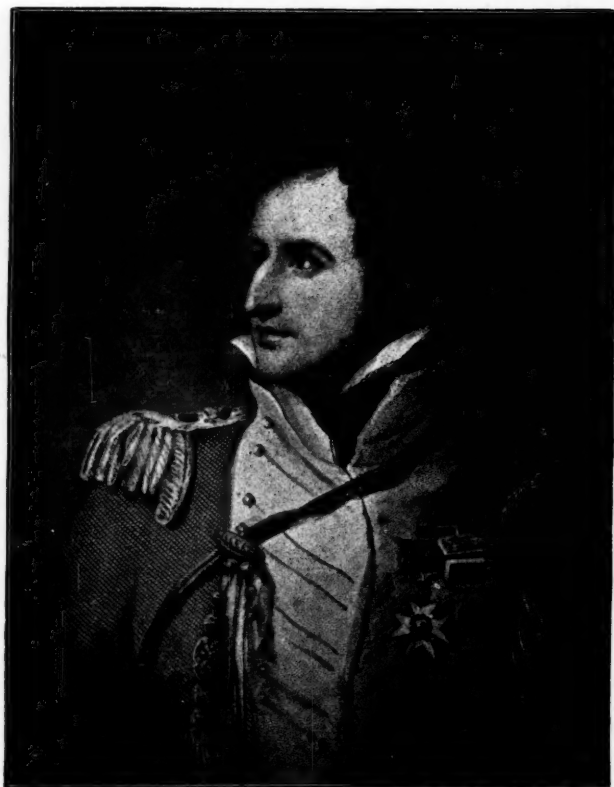
The price has been reduced from 5s. to 2s. 6d., which brings it within the reach of the non-commissioned ranks, and the purchaser will find that he has got good value for his money.

As regards the first half of the work, which deals with military law, it may be described as a very useful guide to the study of the Army Act and Queen's Regulations. Captain Morrison is an experienced and successful instructor, and has selected with excellent judgment the parts of the regulation books which company officers ought to master, and has marshalled his facts with admirable clearness. If a cadet or Militia officer will take these notes and study them in connection with the official books, looking up the references in the margin, an examination in military law will have no terrors for him. The examples given by Captain Morrison of commanding officers' punishments, fines for drunkenness, and to explain the duration of terms of imprisonment will be found most helpful. Court-martial procedure and the laws of evidence are dealt with clearly and within moderate compass.

But the chief value of Captain Morrison's book, perhaps, lies in the latter part, which treats of military administration. No other writer has occupied the field, and officers entering the Army through the Militia who have not had an opportunity of studying such matters as organisation, the conditions of enlistment and terms of service, the rules for deprivation and forfeiture of pay, and for the grant and forfeiture of good-conduct badges, and the system of payment of squadrons and companies, cannot do better than study Captain Morrison's book. The facts are drawn from the Royal Warrant for pay, the Financial Instructions, the Recruiting Regulations, the "Army Book for the British Empire," and various other sources, and concern the every-day duty of the officer. Officers preparing for examination for promotion in subjects (a), (c), and (g) will find this book a trustworthy guide, and nowhere else can the same information be so easily obtained. The examples of soldiers' accounts are much to be commended, and will well repay study. On the whole, a wide circulation may be predicted for this clear and comprehensive compilation.







*J. J. Keliker & Co., London.*

**General Sir WILLIAM F. P. NAPIER, K.C.B.**

*(Historian of the Peninsular War.)*

